

PROTECTION OF GLOBAL CLIMATE: A REVIEW OF DEVELOPMENTS *

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I. Introduction

The international efforts to safeguard the global climate have led to a dynamic process aimed at developing a legal regime which will ensure the adequate and effective protection of mankind against the adverse effects of climate change caused by human activities. The purpose of this study is to review the main developments which have occurred since the Government of Malta took the initiative to raise the question of climate change at the 43rd Session of the United Nations General Assembly.

The problem of climate change is a complex and intricate one. Clearly it is impossible, in this study, to discuss or even attempt to deal with the scientific aspects of the issue. In this respect, the reader would do well to refer to the proceedings of conferences and scientific literature which have dealt with the phenomenon of climate change. ²

For the purposes of this study, it is sufficient to note that there is now considerable scientific support for the view that the world will face a warming of the order of 1° to 2° C by 2030. ³ Furthermore, there is considerable evidence to link this global warming to the emission of the so-called "greenhouse gases" - predominantly carbon dioxide from fossil fuel burning ⁴ - into the atmosphere. ⁵ These gases, it is thought, interfere with the manner in which the earth maintains its temperature balance causing it to warm up.

At first sight, the estimated warming does not seem to be too alarming. The seriousness of this increase, however, is best appreciated if one considers the fact that such warming, over such a brief period, is unknown in the history of civilised man. In effect, the activities of the some 5 billion persons, who inhabit planet earth, are producing changes in the composition of the atmosphere which can lead to catastrophic results threatening mankind's very existence.

The need to protect the earth's climate has, over the last twelve months, been raised to the top part of the international political agenda. This widespread consciousness is due to a number of reasons such as the impressive scientific research that has been undertaken; the success in concluding, as will be seen below, a framework convention to deal with another international environmental problem, the protection of the ozone layer; the work of the United Nations system particularly that of WMO and UNEP; the findings of the World Commission on Environment and Development; ⁶ and the 1988 Maltese initiative at the 43rd General Assembly of the United Nations.

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II. The Maltese Initiative

On the 22nd August, 1988, the Maltese Government agreed to a proposal requesting the United Nations to concern itself with the need to protect the global climate.¹ This request was conveyed to the Secretary General of the United Nations by Malta's Permanent Representative on the 12th September, 1988.² In his letter, the Maltese Representative requested the inclusion of an item on the agenda of the 43rd Session of the General Assembly entitled **Conservation of Climate as part of the Common Heritage of Mankind**.³ The request was accepted by the Assembly's General Committee.⁴ Furthermore, in view of the importance of the subject which the Maltese request had raised, it was agreed that a Plenary Meeting of the General Assembly would be convened to discuss the protection of the Global Climate.⁵ This meeting was followed by a debate in the Second Committee which is responsible for economic and environmental issues.⁶ Some seventy States called for the need to take appropriate measures to protect climate.⁷

On the 23rd November, 1988, a resolution on the matter - presented by Malta and co-sponsored by Australia, Canada, Colombia, El Salvador, Fiji, Finland, India, Jamaica, Morocco, New Zealand, Norway, Papua New Guinea, Poland, Samoa, Solomon Islands, Sweden, Togo, United Kingdom and Vanuata - was adopted by the Second Committee.⁸ The said resolution entitled **Protection of Global Climate for Present and Future Generations of Mankind** (Resolution 43/53) (*vide* Annex 1) was unanimously adopted without a vote in the Plenary Meeting of the General Assembly on the 6th December, 1988.⁹

Resolution 43/53

The Maltese initiative sought to ensure that the problem of climate change was addressed on a multilateral basis. The global nature of the problem made the United Nations the natural forum within which the international community could formulate an effective and comprehensive strategy to protect climate.¹ Furthermore, whilst significant work - particularly scientific research - both within and outside the United Nations system had been undertaken,² there existed no mechanism which could co-ordinate these efforts.³ In view of the magnitude of the problem and the limited resources available, the Maltese Government sought to establish an international strategy which would enable the world community to review the ongoing work and recommend how best to tackle the problem.

Resolution 43/53 attempts to provide a framework within which mankind's strategy to protect the global climate could be devised. The two main components of this framework are - a legal component and an organisational one.

The first and second substantive paragraphs of the Resolution state that the General Assembly recognises climate change as "*a common concern of mankind, since climate is an essential condition which sustains life on earth, and determines that necessary and timely action should be taken to deal with climate change within a global framework.*"

Paragraphs 3 to 9 consider the work relating to climate change undertaken by the appropriate organisations. The international community is urged by

the General Assembly in paragraph 6 to “*treat climate change as a priority issue*” and to encourage further research on the subject.

The General Assembly also endorsed the joint action of WMO and UNEP in setting up a Intergovernmental Panel on Climate Change ⁴ and called upon all relevant organisations and programmes of the United Nations system to support the Panel’s work. ⁵ This would seem to suggest that the General Assembly considered the IPCC (its first meeting was held whilst Resolution 43/53 was still being discussed) to be the main vehicle for executing its programme of work. This view is supported by the text of the all-important paragraph 10 which spells out in detail what action the General Assembly requested from the WMO Secretary General and the UNEF Executive Director. It is clearly stated that such action should take place “*through the Intergovernmental Panel on Climate Change.*”

In view of its central importance, paragraph 10 is reproduced hereunder:

“10. Requests the Secretary-General of the World Meteorological Organisation and the Executive Director of the United Nations Environment Programme, through the Intergovernmental Panel on Climate Change, immediately to initiate action leading, as soon as possible, to a comprehensive review and recommendations with respect to:

- (a) The state of knowledge of the science of climate and climatic change;*
- (b) Programmes and studies on the social and economic impact of climate change, including global warming;*
- (c) Possible response strategies to delay, limit or mitigate the impact of adverse climate change;*
- (d) The identification and possible strengthening of relevant existing international legal instruments having a bearing on climate;*
- (e) Elements for inclusion in a possible future international convention on climate.”*

An examination of the work undertaken by the IPCC demonstrates that it has become the main forum wherein the action referred to in paragraph 10 is effected. ⁶ At its first Session - which commenced on the 9th November, 1989 - it was decided to establish three working groups. Their tasks were the following: Working Group 1 was to report on the assessment of available scientific information on climate change; ⁷ Working Group 2 was to consider the element of environmental and socio-economic impacts of climate change; ⁸ and Working Group 3 was to examine the formulation of response strategies to climate change. ⁹ It is the work of the third Group which is particularly relevant to this review; the consideration of the legal aspects of climate change; is the responsibility of this Group.

IV. Canadian Initiatives

Canada has played an important role in the quest to protect the world’s climate. Until the first few months of 1989, the Canadian position favoured not a climate convention but one to protect the earth’s atmosphere. The position is reflected in the Conference Statement issued at the 1988 ***Conference on the Changing Atmosphere: Implications for Global Security.*** ¹ Whilst recognising the need to protect the earth’s climate, the Statement accepted the

offer of the Canadian Prime Minister to host a meeting of law and policy experts to elaborate “*the principles to be included in an umbrella / framework Convention on the Protection of the Atmosphere...*”²

The Meeting was held in Ottawa between the 20th and the 22nd February 1989. At this Meeting it became clear that a number of participants did not agree with the Canadian position. They were anxious, at least for the time being, not to seek an ‘Atmosphere Convention’, as they feared it could lead to the same protracted negotiations which the Third United Nations Conference on the Law of the Sea faced. The Meeting Statement adopted a compromise which gave the elements for the development of a Climate Convention and protocols, but which also dealt with the elements for an Atmospheric Protection Convention.³ Canada now fully supports the preparations for the negotiations of a Climate Convention.⁴

V. The Declaration of The Hague

On the initiative of Prime Ministers Brudtland, Lubbers and Rochard, twenty-four state-leaders met, at The Hague on the 11th March, 1989, to consider how the earth’s endangered atmosphere could best be protected. At the end of this summit, the **Declaration of The Hague** (*vide* Annex 2) was passed.¹ This innovative document recognised *inter alia* the dangers linked to the “*warming of the atmosphere.*”² It noted that the issue was being addressed by the IPCC, and that Resolution 43/53 recognised “*climate change as a common concern of mankind.*”³ All States and international organisations were invited to “*join in developing, taking into account studies by the IPCC, the framework conventions and other legal instruments necessary to establish institutional authority and to implement the other principles ... to protect the atmosphere and to counter climate change, particularly global warming.*”⁴

Whilst there was widespread agreement amongst the “Hague participants” on the need for urgent action, the approach to be adopted was controversial. It was generally accepted that the problem of atmospheric environmental degradation called for new and innovative approaches, largely “*through the development of new principles of international law including new and more effective decision-making and enforcement mechanisms.*”⁵ The question as to what entity should be responsible for developing and introducing these new approaches proved to be very controversial. Some States strongly favoured the establishment of a new international authority which would be primarily responsible for protecting the earth’s atmosphere. It was felt that the current existing institutions were incapable of dealing with contemporary environmental problems. Other States refused to endorse this idea.⁷ They demonstrated a strong reluctance in accepting to create “*yet another institution.*” In their opinion, UNEP and similar entities could perform the functions envisaged by the Declaration if they were “strengthened” to enable them to deal effectively with environmental problems and to ensure the global implementation of solutions.

This controversy, which remained unsolved, is reflected in paragraph 10(a) of the Declaration. The signatories agreed to develop within the United Nations

framework “*new institutional authority, either by strengthening existing institutions or by creating a new institution, which in the context of the preservation of the earth’s atmosphere, shall be responsible for combating any further global warming of the atmosphere...*”⁸

A number of States strongly expressed the view that any effective decision-making mechanism could not depend on the achievement of a consensus. It was felt that if the unanimous support of the world community was to be sought every time a decision had to be taken, this would be time consuming. The need for urgent solutions, they stressed, required prompt decision taking. Furthermore, due to the nature of the problems envisaged effective solutions required global application. Consequently, they envisaged situations where even dissenting States would be required to implement decisions taken. The Declaration, in paragraph 10(a), reflects this view by acknowledging the need to adopt “*such decision making procedures as may be effective even if, on occasion, unanimous agreement has not been achieved*”

The Declaration also deals with two areas which are of particular importance to the climate debate. The first relates to the need to take measures with respect to “*emissions that effect the atmosphere.*”¹⁰ The second relates to the question of responsibility and liability. It was recognised that most of these emissions currently originate in the industrialised States¹¹ which also had the greatest resources to deal with the problem effectively. The Declaration stressed that the international community “*especially industrialised nations have special obligations to assist developing countries which will be very negatively affected by changes in the atmosphere although the responsibility of many of them for the process may only be marginal today.*”¹²

VI. UNEP

As already been stated, UNEP and WMO have played a vital role in ensuring that the plan formulated in the United Nations Resolution 43/53 is carried out.¹ It was to be expected that the issue of climate change would be extensively discussed at the 1989 Meetings of their governing bodies. In this section, it is intended to review the work of the Fifteenth Session of the UNEP Governing Council as reflected in its Decision 15/36.²

Over a hundred States participated in the Council debate on climate change. Their deliberations led to Decision 15/36 entitled **Global Climate Change** (*vide* Annex 3). When compared to its former Decision 14/20 of June 1987, on the same subject, the latest Decision demonstrates clearly the catalytic effect of the United Nations Resolution 43/53. After recalling the General Assembly’s Resolution, the Decision enlists the numerous international meetings concerned with climate change which occurred after the Resolution’s adoption.³

Through its Decision 15/36, the Governing Council authorised the UNEP Executive Director to, *inter alia*, support the work of the IPCC.⁴ It noted that the Panel intended to present its first *interim* report not later than October 1990⁵ and requested the UNEP Executive Director, in co-operation with the WMO Secretary General “*to begin preparations for negotiations on a framework convention on climate.*”⁶ Whilst the commencement of the said

preparations was not controversial, the date when the actual negotiations were to start was. Some States wanted to see the work of the IPCC finalised before negotiations could begin. The majority preferred to authorize UNEP to start negotiations after the *interim* report of the Panel was adopted, that is not later than October 1990. Decision 15/36 adopted the latter view and recommended that the negotiations on a framework climate convention “*should be initiated as soon as possible immediately after the interim report.*”⁷

The preparation for negotiations have already started. The executive heads of UNEP and WMO established a “*task force*” made up of representatives of WMO and UNEP, the co-ordinator of the Second World Climate Conference, and experts.⁸ The main function of this body is to advise both organisations on the implementation of the decisions of their governing bodies with respect to the preparations for the negotiations leading to a climate convention.

It is noteworthy that the WMO Executive Council at its June 1989 Meeting called upon the Organisation to convene the Second World Climate Conference between the 12th and 21st November, 1990.⁹ This Conference which will meet only a few weeks after the presentation of the IPCC *interim* report, will provide a major opportunity to examine the *interim* report. It is envisaged that the Conference will have two “*interlocking segments.*”¹⁰ One would be of a technical nature, wherein the scientific consideration and debate on climate issues would take place. The other segment would provide a forum for Ministerial policy discussions.¹¹

VII. Other International Fora

The problem of climate change has been discussed at a number of other international meetings. In this section, it is proposed to review briefly the relevant provisions of the final documents which were adopted by the said meetings.

Between the 7th and 10th November 1988, representatives from developed and developing States, as well as members of the scientific and industrial community, met at the **World Congress on Climate and Development** in Hamburg. This Congress gave particular attention to the issue of climate change and its economic, social and technological implications.¹ In its Final Conclusion, the Congress expressed the urgent need for political and scientific leadership as well as a need for industrial and consumer action to reduce the emission of “*greenhouse gases.*”⁴ It supported the negotiation of a “*global convention*” designed to protect the climate.³ The need for such a convention was particularly supported by the NGOs attending the Congress. They envisaged a convention - to be negotiated by 1992 - which aimed at stabilising “*the concentration of greenhouse gases.*”⁴ Four participants at the Congress supported the idea of developing a protocol - within the framework of the **Geneva Convention on Long-Range Transboundary Air Pollution** -⁵ to control *inter alia* the emissions of volatile organic compounds.⁶

The problem of global warming and climate change, as it effected developing States, was considered at a conference held in New Delhi between the 21st and 23rd February, 1989.⁷ The Conference Statement refers to the “*A Maltese initiative at the 1988 United Nations General Assembly ...*”⁸ and

noted that the initiative “*gained global support.*”⁹ This widespread support was interpreted “*as an expression of international concern over the problem*” of climate change.¹⁰ The Statement gave “*particular relevance*” to the call in the Maltese initiative for “*the initiation of work on international legal instruments to address climate change.*”¹¹ Nevertheless, it is significant that the New Delhi Conference fell short of fully supporting the conclusion of a framework climate convention.

Closely related to the problem of climate change is the serious depletion of atmospheric ozone. At the time of the conclusion of the 1985 **Vienna Convention, for the Protection of the Ozone Layer**¹² and the 1987 **Montreal Protocol on Substances that Deplete the Ozone Layer**¹³, there was not widespread recognition of this important relationship.¹⁴ Increasingly, States are becoming aware of the fact that certain ozone depleting substances are “greenhouse gases” which lead to global warming and contribute to climate change. The Chairman’s message from the 1989 **London Conference on Saving the Ozone Layer** noted that action to protect the ozone layer will, at the same time, reduce the impact of global warming.¹⁵

The characterisation of some ozone depleters as “*powerful greenhouse gases leading to global warming*” was recognised by Governments and the European Communities represented at the First Meetings of the Parties to the **Vienna Convention and the Montreal Protocol in the Helsinki Declaration on the Protection of the Ozone Layer** (*vide* Annex 4) adopted on the 2nd May, 1989.¹⁶ It is significant that in their efforts to phase out the production and consumption of CFCs controlled by the Montreal Protocol, the “greenhouse effect” of CFCs was widely recognised. In effect, this relationship must also be considered in the light of developing a legal framework to protect the climate. Should the regime to protect the global climate from the said ozone depleting substances be developed within the proposed climate convention or should it fall under the 1985 **Vienna Convention**? It is suggested that the latter course of action would be more reasonable. It would seem safe to expect that the development of such a regime would take place faster under the already established **Vienna Convention** framework.

It is significant that Decision 15/36 of the UNEP Governing Council recommends that Governments should accede to the **Montreal Protocol** and comply with its regulatory measures.¹⁷ The Decision notes that the international community’s ultimate objective should be “*as far as possible, completely, eliminating the emission of the controlled substances to better protect the ozone layer and the global climate from change, consistent with the Helsinki Declaration ...*”¹⁸

The 1989 **Francophone Summit** adopted a resolution on the environment (*vide* Annex 6).¹⁹ In this resolution, the participants expressed the view “*that in order to ensure the implementation*” of the “Hague Declaration principles”, “*negotiations must start as soon as possible to find solutions to the problems related to global warming, by emphasising the need for a convention on the protection of global climate ...*”

In the **Economic Declaration** (*vide* Annex 6) issued at the **Summit of the Arch** - wherein the Heads of State or Government of seven industrial nations

and the President of the European Communities' Commission participated - a number of environmental issues were considered.²⁰ It was noted that agreement had to be achieved over the urgent necessity of concluding a "framework or umbrella convention on climate change" setting out general principles or guidelines.²¹ This Convention, it was stated, could "immobilise and rationalize the efforts made by the international community."²² The Summit also referred to the need to develop "specific protocols containing concrete commitment" which could be fitted into the "framework as scientific evidence requires and permits."²³ Even the Non-Aligned Movement called for a climate convention. At its **Ninth Conference of the Heads of State or Government of the Movement of Non-Aligned Countries, held in September 1989**, it was agreed to call "for the preparation and adoption of an international convention on the protection and conservation of the global climate on an urgent basis." (vide Annex 7)

The Heads of Government of the Commonwealth, at their 1989 meeting in Malaysia, issued the **Langkawi Declaration on Environment**. (vide Annex 8) Their deliberations leading to this Declaration demonstrated a difference in the approach to the climate change issue. Some States preferred to see a meeting declaration which would concentrate on climate change as an environmental problem to which an urgent and effective solution was needed. Other states wanted to consider all environmental issues, including climate change, and their relationship to the economic development process. The **Langkawi Declaration** tends to reflect the latter view.²⁴ Nevertheless, it does contain statements of particular significance to the climate change debate.

The "greenhouse effect (which may lead to severe climate changes that could induce floods, droughts and rising sea levels)" was described as one of the main environmental problems facing the world.²⁵ The Heads of Government called for "the early conclusion" of a climate convention and applauded "the efforts of member governments to advance the negotiation of a framework convention under United Nations auspices." Support was also expressed for the work of the IPCC and the **Commonwealth Experts Group's Report on Climate Change**.²⁷

In its Report²⁸, the Experts Group produced a realistic and effective Action Plan for the Commonwealth.²⁹ With respect to developing international legal instruments to deal with climate change, the Group was firmly in favour of climate convention.³⁰ It noted that the United Nations General Assembly "adopted a resolution introduced by Malta" on the protection of climate.³¹ The Report pertinently points out that whilst it could identify signs of progress in the efforts to develop a regime to protect climate, this should not delay action at national or international level to "enhance the knowledge of the greenhouse phenomenon ... and to develop and apply energy conservation" measures.³²

The Report also addressed the question of developing specific protocols within the climate convention framework. It rightly noted that the negotiation of protocols to deal with such matters as the application of quantitative limits of carbon dioxide emissions "is likely to take time."³³ In this respect, it referred to the conflicting interests between different energy producers, the need

to develop further technology and the funding of technology transfers.³⁴

At the first Meeting of the UNEP / WMO Task Force, held on the 25th October, 1989, it was decided that, whilst the framework climate convention should be based upon the model established by the 1985 **Vienna Convention**, it would be useful to attempt to go beyond this model and propose practical and effective measures to be inserted in the future convention. Three areas were identified: (1) utilising existing technology to improve energy efficiency particularly in the electricity industry supply and use sectors; (2) initiating rational forestation programmes; and (3) establishing mechanisms to assist developing States to deal with climate change.

The Task Force agreed to avoid duplicating the work of the IPCC, and to attempt to complement it by offering guidance on political considerations and by recommending a timetable of activities leading to the elaboration of a climate convention. It was the opinion of the Task Force that the Convention should be adopted before the end of 1991.

Significant progress towards assessing clearly the extent of political support for the various strategies to protect the global climate was made at the **Ministerial Conference on Atmospheric Pollution and Climate Change** held in Noordwijk, the Netherlands (*vide* Annex 9).³⁵ At this Ministerial Conference, senior representatives of sixty States considered in detail the problem of man made changes to the global climate. The Conference tackled extensively the question of limiting carbon dioxide emissions. The issue proved to be controversial with the U.S., U.K. the U.S.S.R. and Japan refusing to adopt a Dutch proposal for stringent controls. The compromise adopted by the Declaration included a recognition for the need to stabilize, while ensuring stable development of the world economy, carbon dioxide emissions. This stabilization, was to be achieved “*as soon as possible at levels to be considered by the IPCC and the Second World Climate Conference ...*”³⁶

With respect to the development of a climate convention, the Conference considered a **Background Paper on Elements of an International Convention on Climate** prepared by Canada and Malta. All States were urged to assist in the ongoing work with respect to the compilation of elements for a framework climate convention, so as to ensure that negotiations could start as soon as possible after the adoption of the **IPCC Interim Report**.³⁷ It envisaged the adoption of the said convention as early as 1991 and at the latest by the time of 1992 **United Nations Conference on Environment and Development**.³⁸

It is noteworthy that the **Noordwijk Declaration** requested that the preparations for the Climate Convention should take into account the 1985 **Vienna Convention** and the 1987 **Montreal Protocol**.³⁹ The preparations were also to take into account “*innovative approaches*” which may be required in view of the complex character of the climate change problem.⁴⁰

At a meeting of representatives from small States held in the Maldives between the 17th and the 18th November, 1989, particular attention was given to the question of sea-level rise (*vide* Annex 10). The issue of climate change is closely related to this question which is of a special interest to small island states. There is widespread agreement that global warming will bring about a rise in the global sea level. It has been concluded that the “best” estimate

is that which considers a rise of between 17 and 26 cm by 2030, corresponding to a 1° to 2° C warming over the same period. ⁴¹

VIII. Malta's Views on the Legal Regime to Protect Global Climate

Malta proposed the idea of a framework convention on climate as early as the 27th October, 1988. On that day, in a Statement to the Second Committee of the United Nations General Assembly, the author - on behalf of the Government of Malta - expressed the view that the ongoing international efforts to protect the global climate should lead to the adoption of a framework international convention on climate. ¹

On the 6th of February, the author - on behalf of the Government of Malta - presented the IPCC with a report entitled **Possible Elements For an International Legal and Institutional Strategy on Climate Change and Global Warming**. In this study, the Maltese Government reiterated its support for a framework international convention on climate. It proposed the 1985 **Vienna Convention** as a model to follow in the drawing up of the climate convention. The Report stated that the Convention could provide a legal and institutional framework within which national, regional and international measures to deal with the problem of climate change can be developed, co-ordinated and implemented. The Convention would lay down general principles with respect to climate, establish institutional mechanisms to co-ordinate the international management of the problem of climate change, and provide a procedure for the peaceful settlement of disputes.

Malta proposed specific elements for inclusion in a framework convention on climate in a document on legal measures and processes presented to the IPCC Working Group III. The suggested elements include:

(I) Preamble incorporating the following items:

- (a) A brief introductory description of the problem; (b) Recognition and endorsement of the work carried out and being undertaken particularly by the IPCC and related groups; (c) References to:
 - UN General Assembly Resolution 43/53;
 - Principle 21 of the **Stockholm Declaration**;
 - The fundamental right not to be subjected, directly or indirectly, to the adverse effects of climate change (as defined for the purposes of the Convention);
 - Relevant legal instruments.
- (d) Emphasis of the need to balance the sovereign right of States to exploit their natural resources with their duty to protect and conserve climate through limiting emission and increasing the absorption of "greenhouse gases" for the benefit of present and future generations.
- (e) A statement on the importance of technology transfer for purposes of undertaking economic activities (including energy conservation measures) to limit emissions of "greenhouse gases", taking into account, in particular the need to assist in the economic development of the developing countries. (f) Recognition of the need to increase

research to further develop the scientific knowledge of climate and climate change. (g) A statement urging the further study of social and economic impacts of climate change. (h) Affirmation of the need to develop strategies to limit, reduce and as far as possible prevent climate change, bearing in mind the special circumstances of States.

(II) A section on Definitions would follow, including, *inter alia*, definitions of: Climate, Atmosphere, Climate Change, Adverse Effects.

(III) The substantive text would deal with *inter alia*:

- (a) The recognition that Man has a fundamental right not to be subjected, directly or indirectly, to the adverse effects of climate change (as defined for the purposes of the Convention), and that therefore,
 - States bear a solemn responsibility to protect and improve the composition of the atmosphere in order to protect and conserve climate for the benefit of present and future generations;
 - climate change is a common concern of mankind;
 - States have the sovereign right, in accordance with the United Nations Charter, to exploit and utilize their climate pursuant to their environmental policies, and subject to their obligations under international law;
 - States are obliged to exploit and utilize their environment in a reasonable and equitable manner so as not to cause climate change;
 - States are not to threaten, or cause climate change;
 - climate can only be exploited and utilised for peaceful purposes.
- (b) The need of all Parties to take all appropriate measures to limit, reduce and, as far as possible, prevent climate change, including the development and implementation of appropriate policies and strategies.
- (c) The obligation of the Parties to undertake not to transfer adverse effects on the climate into any other adverse environmental effects.
- (d) The identification of the major factors contributing to climate change including particular references to “greenhouse gases”, deforestation and changing land-use patterns.
- (e) The need to strengthen the relevant existing international legal instruments, which have a bearing on climate, and to conclude new protocols to implement the various principles / provisions and measures listed in the Convention.
- (f) The need to provide for the stabilization of carbon dioxide emissions.
- (g) Provisions dealing with international co-operation which would include a general obligation to co-operate in the implementation of measures as stated above, and articles dealing with:

- Free exchange of scientific, technological, socio-economic and other information;
 - Co-operation in facilitating the development and transfer of relevant technologies and the provision of technical assistance, bearing in mind the needs of the developing countries;
 - Research and systematic observations, their collection and transmission.
 - Prior notice and environmental impact assessment of planned activities;
 - Consultations; and
 - Consideration of a Protocol to establish a World Atmosphere and Climate Fund.
- (h) An article allowing Parties to enter bilateral, multilateral or regional agreements / arrangements provided that they are not incompatible with the Convention.
- (i) The recognition of the need to provide mechanisms to:
- ensure widespread and general respect for the principles enunciated in the Convention;
 - develop and conclude supplementary Protocols;
 - implement and enforce measures and standards provided for under the Convention and its supplementary Protocols;
 - ensure that relevant legal instruments remain adequate to cope with the problem of climate change;
 - regulate relevant activities occurring in areas which fall outside national jurisdiction; and
 - develop strategies dealing with other atmospheric problems.
- (j) The following mechanisms would be established under the proposed Convention:
1. A Conference of the Parties, on the lines of the **Vienna Convention**
 2. A Secretariat, also on the lines of the **Vienna Convention**; and
 3. An executive committee / extended bureau / monitoring body. This body would have surveillance, regulatory and decision-making functions, and would be composed of the Contracting Parties on an rotation basis; the status of such a body would necessarily embody a political aspect, and should therefore be established at Ministerial level.
- (k) Apart from the articles establishing the mechanism in (j) above, further articles would provide for:
- Transmission of information on implementation measures adopted by Parties, to the Conference of the Parties through the Secretariat;
 - Assessment and review of limitation, reduction and prevention measures;
 - Non-compliance provisions.
- (l) An article would provide for the adoption of protocols.

- (m) Articles, on the lines of the **Vienna Convention**, would provide for the amendment of the Convention and Protocols, and the adoption and amendment of annexes.
- (o) Settlement of disputes; this section would include a compulsory system of peaceful settlement of disputes. To this end, States would be obliged to reach a solution by negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies, or arrangements, or other peaceful means of their own choice. Where no settlement could be reached, the Convention should provide for the following mechanisms to achieve binding decisions: The International Court of Justice; A tribunal for Atmospheric Alterations (such a tribunal could be established on an *ad hoc* basis); A specially appointed arbitration tribunal.
- (p) Usual final clauses, as in the **Vienna Convention**, would include:
 - Signature
 - Ratification
 - Accession
 - Right to Vote
 - Relationship between the Convention and its Protocols
 - Entry into Force
 - Reservations
 - Withdrawal
 - Depositary
 - Authentic Texts

In its Report, Malta expressed the view that entry into force of the Convention should reflect the realities of the problem of climate change, by requiring the general participation of countries which emit significant levels of “greenhouse gases”, or have the potential to do so in the foreseeable future (for example, due to population size).

IX. Common Concern of Mankind

If an effective solution to the problem of climate change is to be secured, it is important that certain human activities - such as fossil-fuel burning - are regulated. These activities usually occur within a State's boundary. it is therefore reasonable to expect - at least for the time being - that any internationally accepted regulation would generally depend largely on the national enforcement of limitations, standards and measures. A major international problem could occur when a State allows the unregulated conduct of activities - within its national jurisdiction - which cause, or are likely to cause climate change resulting in significant adverse environmental, economic or social effects beyond its frontiers. Furthermore, the global nature climate requires that protective measures should enjoy general application if they are to be truly effective. States (or even a State), which refuse to adopt internationally agreed measures, could not only cause transboundary harm but also render futile the international community's efforts to protect the global climate.

The problem was pertinently described by the then Maltese Foreign Minister, Dr V. Tabone, in his opening speech at the General Assembly's plenary session on climate:

"The conservation of the global climate system - which 'involves the atmosphere, oceans and land surface (including vegetation) and cryosphere, all of which interact in complex ways over a vast range of time-scales' - is so essential and vital to the very existence of human life that it cannot be left to individual States to unilaterally decide what, if at all, conservation measures should be taken. The fundamental human right to life, and the need to conserve climate as one of the pre-requisites of human life, cannot be limited by political boundaries, and therefore requires an international strategy which transcends State sovereignty in the interests of present and future human generations".¹⁴

International law has a vital role to play in the efforts of mankind to protect the world's environment, including its climate. It is particularly useful in dealing with activities which cause transboundary harm. The **Trail Smelter** case¹; the **Corfu Channel** case²; and the **Lake Lanoux** case³ involved disputes where the matter was considered.

The influence of general principles of law in the solution of such disputes is significant. In the **Trail Smelter** case, the tribunal held;

"Under the principles of international law, as well as of the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence".⁴

Reference can also be made to Principle 21 of the **Stockholm Declaration on the Human Environment** wherein States, in exploiting their own resources, are held responsible *"to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limites of national jurisdiction"*. Support for and interpretation of this principle can be found in U.N. Resolutions⁵ and State practice⁶. The 1982 **Law of the Sea Convention** incorporates this principle in Article 192 (2).⁷

In view of the magnitude and nature of environmental degradation - including climate change - the harm caused is generally not just transboundary but global in character. Consequently any international regulation has to be undertaken within a global framework if it is to be effective. It is submitted that this requirement emphasizes the urgent need to develop and codify the relevant international rules. This need has, in recent months, been recognised in a number of important fora. The 1988 **Toronto Conference on the Changing Atmosphere** in its final statement called for:

*"the progressive development and codification of the principles of international law taking into account the general principles of law set out in the Trail Smelter, Lake Lanoux, Corfu Channel cases, Principle 21 of the 1972 Declaration of the United Nations Conference on the Human Environment ..."*⁸

A similar position was taken by the **Declaration of The Hague**:

*“Therefore we consider that, faced with a problem the solution to which has three salient features, namely that it is vital, urgent and global, we are in a situation that calls not only for implementation of existing principles but also for a new approach, through the development of new principles of international law including new and more effective decision making and enforcement mechanisms”.*⁹

Resolution 43/53 in its operative paragraph 10 requested that action should be taken to make, “as soon as possible” a comprehensive review and recommendations with respect to *inter alia* the identification and possible strengthening of relevant existing international legal instruments having a bearing on climate, and the proposal of elements for inclusion in a future international convention on climate.

Significantly, the U.N. Secretary General in his 1987 **Report on the Work of the Organisation** stated:

*“There is also the need to address the question of the environment as a totality and to establish clear and equitable norms for the environmental behaviour of States through international law”.*¹⁰

In this respect, it is pertinent to refer to the concept of the common concern of mankind which was introduced by Malta in the General Assembly deliberations on the protection of the global climate. In the above-mentioned intervention, the Maltese Foreign Minister, Dr V. Tabone explained:

“Climatic change is a common concern of mankind, which is a corollary of the common heritage doctrine, requiring a conservation-strategy the application of which cannot be restricted by political boundaries, and must necessarily have as its primary objective the common good of mankind. In short, what Malta is today proposing is a development and an elaboration of the doctrine of the Common Heritage of Mankind for its application to a new area - Climatic Change particularly global warming”.

*“We must, Mr President, ensure that a balance is achieved between the short-term requirements and the future needs of mankind. The application of the common concern of mankind principle to climate ensures that climate is a natural resource which can be utilized by each State within its territory in the process of its social and economic development, but at the same time, it cannot be tampered with or abused of at the expense and to the detriment of mankind”.*¹¹

Certain aspects of the above-mentioned Maltese statement are reflected in Resolution 43/53. In the first operative paragraph of the Resolution, the General Assembly unanimously characterized climate change as a “common concern of mankind”.^{11a} On the basis of this recognition, it may be asked: can a State legitimately refuse to implement internationally agreed measures to protect the climate such as limiting carbon dioxide emissions? Can it claim that the implementation or otherwise of the said measures within its territory is a matter to be decided exclusively by the State itself? Can it not argue that this matter falls essentially within its domestic jurisdiction particularly as such limitations could have a negative effect on the growth of its economy?

Any international process, which attempts to develop a legal regime to effectively protect the global climate, must address these questions. It will have

to consider whether the principle of domestic jurisdiction can be used to prevent the implementation of internationally agreed measures and thereby risk rendering such measures futile.

It is generally agreed that the meaning of domestic jurisdiction is one which can change over a period of time. It is not immutable as the Permanent Court of International Justice noted some sixty six years ago in the **Tunis and Morocco Nationality Decrees** case: *"The question whether a certain matter is or is not solely within the jurisdiction of a State is an essentially relative question; it depends upon the development of international relations"*.¹² In fact, over the last decades there has developed general support for the idea that certain matters, such as human rights, no longer fall within the "domain reserve". In such cases, action taken by the international community in respect of activities occurring within a State may be legitimate.

Does the characterisation of climate change as a "common concern of mankind"¹³ tend to suggest that in the General Assembly's view climate change has been elevated from the "reserved domaine" of States? It is submitted that whilst it would be premature - at least for the time being - to give an affirmative answer, there seems to exist considerable evidence to suggest that the position may change. In Resolution 43/53, the U.N. General Assembly explained that it considered climate change to be *"a common concern of mankind"*, as *"climate is an essential condition which sustains life on earth"*.¹⁴ The implication seems to be that since the phenomenon of climate change threatens the existence of life itself, it is a matter which concerns mankind.

This approach links the whole issue of climate change with the protection of human rights. The Maltese Foreign Minister, in the above-mentioned Statement, clearly supported this linkage: *"... The global climate system ... is so essential and vital to the very existence of human life that it cannot be left to individual States to unilaterally decide what, if at all, conservation measures should be taken"*.¹⁵

The right to live and atmospheric degradation are linked in the **Declaration of The Hague** which in its opening paragraphs stated:

"The right to live is the right from which all other rights stem. Guaranteeing this right is the paramount duty of those in charge of all States throughout the world.

Today, the very conditions of life on our planet are threatened by the severe attacks to which the earth's atmosphere is subjected".

In his address to an international conference held under the auspices of the Conference on Security and Co-operation in Europe, the U.S. representative stated:

*"... the degradation of any part of the natural environment, wherever located, diminishes us all. As President Bush expressed it recently in Budapest ... 'our shared heritage is the earth, and the fate of the earth transcends borders - it isn't just an East-West issue' ..."*¹⁶

The global character of the climate system tends to support the view that climate change is a matter of "international concern."^{16a} As has been previously noted, any effective protection of the climate system ultimately

depends on the global application of agreed measures. It is noteworthy that in Resolution 43/53, the Assembly determined that “necessary and timely action should be taken to deal with climate change within a global framework;”¹⁷

A number of distinguished persons have commented on the “common concern of mankind” concept. In his analysis of Resolution 43/53, the Prime Minister of Malta Dr. E. Fenech Adami stated:

*“We believe that this Resolution will provide the basis for global action to conserve the world’s climate. Of particular importance is the unanimous recognition by the world community that climate change is the common concern of mankind. Malta feels that this concept lays the ground for the development of a new principle of international law. Such a principle would allow the international community to concern itself with activities which cause, or threaten to cause, adverse climate changes even when such activities occur within a State’s frontiers.”*¹⁸

The significance of the “common concern” concept was also considered by Dr M. Tolba, the Executive Director of UNEP:

*“... I was in New York for only 48 hours introducing some subject to the General Assembly and I went back to Nairobi. There I started getting the signals that there was a development and evolution of the idea of common heritage into another new one, ‘common concern’. Rather than being worried, I started being scared as this would really get the whole thing upside down. Everybody would look at the issue of ‘common concern’ in a completely different vision. ‘Common concern’ does mean that every human being under the sun can have his finger and poke into pie of everybody else and I could not imagine that anybody could accept that. ‘Common heritage’ was for me probably even more acceptable than ‘common concern’ and here comes the General Assembly and accepts for the first time a principle which, when it comes to codification of the law, probably not in a year or two but in three, four years to come, it will be felt very strongly. This significant move took place in the General Assembly through the Maltese initiative which I termed a ‘most remarkable initiative.’”*¹⁹

The potential of the ‘common concern’ concept has been noted by the international environmental law specialist, Professor P. Birnie.

*“This variant of the common heritage approach could provide the basis for new conceptual treaty-making and insitutional initiatives, which are now being studied by an Intergovernmental Panel on Climate Change.”*²⁰

It is submitted that at least two major obstacles must be surmounted before the matter of climate change may be considered to have emerged from a State’s reserved domain. The first relates to the scientific controversy which still surrounds climate change and its effects. The work of the IPCC should provide an authoritative report on the best scientific consensus on the phenomenon and its effects. Before this is achieved there can be little hope of a political consensus on the policy responses to climate change.

The second obstacle is the question of funding activities to limit, reduce, and prevent climate change.²¹ Briefly, the developing States argue that they should be compensated for undertaking these activities when they have a negative effect on economic development.²² The problem has been pertinently described by Sir Crispin Tickell, the British U.N. Permanent Representative:

*“... because all change tends to be disruptive, nothing will be cheap. We accept that the industrial countries, who unwittingly created the problem, will have to give leadership in discouraging the further build-up of greenhouse gases. We also accept that these countries will have to find means to help others leapfrog over the technologies which have caused the problem, and give the necessary help, some through multilateral, some through bilateral channels.”*²³

As these obstacles are specific to the problem of climate change, it should be stressed that there is nothing to impede the concept of the “common concern of mankind” from being applied to other areas. Indeed, the **Langkawi Declaration on Environment** refers to “the current threat to the environment” as a “common concern of mankind.

The issues discussed above are intimately related to the so-called Doctrine of Obligations *Erga Omnes*. In the **Barcelona Traction, Light and Power Co.** case, the International Court of Justice tended to recognise the possibility that a State may have obligations towards the international community as a whole, i.e. obligations *erga omnes*.²⁴ The doctrine was held to apply to aggression, genocide and basic human rights. If this doctrine is accepted, then (at least in respect of the matters to which it applies) it would give further support to the “common concern” concept. For it would seem that States - as members of the international community - would be able to concern themselves with activities taking place in another State, even if their own interests are not directly involved.

This view is best reflected in the 1989 initiative taken by the Maltese Government in proposing for consideration by the U.N. General Assembly the environmental protection of extra-territorial spaces. The Maltese draft resolution points out that the comprehensive protection of the global environment must necessarily provide for the effective protection of areas lying beyond national jurisdiction, i.e. the so-called “international commons”,²⁵ The legal interest of the States which co-sponsored the Maltese draft resolution can be found in its first operative paragraph wherein the environmental degradation of areas beyond national jurisdiction was considered to be a common concern of mankind.²⁶ Clearly the environmental protection of State territory, to be truly meaningful, must be accompanied by effective protection being accorded to areas beyond jurisdiction.

It is pertinent to conclude this section by referring to the **Draft on State Responsibility** prepared by the International Law Commission. In Article 19(2), the Draft defines an “international crime” as an internationally wrongful act which results from the breach by a State of an international obligation so essential for the protection of fundamental interests of the international community that its breach is recognised as a crime by that community as a whole. It is significant that international crimes include “serious breaches of

obligations to protect the environment''.²⁷ The concept of an "international crime" seems to invoke the criminal responsibility of a State vis-a-vis the international community, thereby recognising that the international community as a whole has rights which States are obliged to respect.

CONCLUSION

The above review of developments shows that the international community is becoming increasingly concerned with the phenomenon of climate change caused by the conduct of certain human activities such as fossil-fuel burning. There is evidence to suggest that the continued growth in atmospheric concentrations of "greenhouse gases" is capable of causing climate change leading *inter alia* to global warming and sea-level rise. This evidence has led to widespread support in favour of developing and codifying international law relating to the protection of global climate. In order to ensure that the developments of the law are based on sound scientific evidence, the international community has felt the need to improve its knowledge of the science of climate and climate change.

Despite the need to enhance the said knowledge, there seems to exist increasing support for the idea of concluding a convention on climate. Such a convention would be a framework convention enunciating the general rules of State conduct with respect to climate change. (It is significant that one of President Bush's proposals at the USA/USSR Summit held in Malta concerned the "holding of a conference in Washington to negotiate a framework treaty on global warming ...").¹ The general view is that whilst such conventions - as the 1985 **Vienna Convention** - provide a useful model, climate change requires developing new legal and institutional approaches. It is also envisaged that protocols, developed within the framework climate convention, will deal with concrete measures in the light of priorities that may be authoritatively identified on the basis of sound scientific knowledge, and on the basis of existing international political commitment.

The magnitude of the climate change problem is gaining widespread recognition. Policy-makers are becoming more and more aware of the need to take action as the intervention of Sir Ian Lloyd in the British House of Commons demonstrates. Sir Ian, who is the chairman of the Select Committee on Energy, warned:

*"... that keeping man's tenancy on earth might require a world-wide programme by comparison with which all previous endeavours, even in war and in putting man on the moon 'will pale into insignificance'."*²

In the face of the catastrophic effects which climate change may bring, urgent action is being called for. The House of Lords Select Committee on Science and Technology, in its recent report on the "greenhouse effect", has concluded that despite uncertain scientific evidence, the world cannot afford to wait for proof before taking action to remedy the process of climate change because by that time it will be too late. The Committee prudently advised:

*"Action, by way of insurance or 'no regrets' policies, is therefore needed in advance of obtaining clear proof that a global warming due to enhanced greenhouse gas concentrations is occurring."*³

REFERENCES

I. INTRODUCTION

- 1 *Vide* in particular the conclusions of the 1985 meeting held at Villach Austria under the auspices of W.M.O., U.N.E.P., and I.C.S.U. *A Report of the International Conference on the Assessment of the Role of Carbon Dioxide and of Other Greenhouse Gases in Climate Variations and Associated Impacts*. (Geneva, W.M.O./I.C.S.U./U.N.E.P., 1986). At this meeting, scientists from 29 developed and developing countries concluded that climate change must be considered as a "plausible and serious probability". The proceedings of the W.M.O. World Climate Programme and the Intergovernmental Panel on Climate Change, referred to below in Section II, also provide an authoritative views of the problem.
- 2 For a brief and concise description of the climate change phenomenon, *Vide* W.M.O. Fact Sheet: *Climate Change and Understanding the Global Atmosphere* (1989). *Vide* also bibliography in Commonwealth Secretariat: *Climate Change: Meeting the Challenge* (London, September 1989).
- 3 *Ibid* p.29; *vide* also U.N.E.P./G.E.M.S. and Beijer Institute: *The Full Range of Responses to Anticipated Climatic Change* (Nairobi, 1989).
- 4 *Vide* W.M.O. Fact Sheet *op. cit.* p.3.
- 5 Other "greenhouse gases" include methane, nitrous oxide and chlorofluoro-carbons. *Vide* U.N.E.P./G.E.M.S.: *The Greenhouse Gases* (Nairobi, 1987).
- 6 *Our Common Future* (O.U.P., 1987)

II. THE MALTESE INITIATE

- 1 Press Release (Dept. of Information, Malta) (September 1989)
- 2 General Assembly Doc. A/A43/241, 12th September 1988.
- 3 *Ibid*.
- 4 Agenda of the 43rd Session of the General Assembly, Item 148.
- 5 *Vide Report of the Second Committee* by the Rapporteur Mr. Martin Walter (Czechoslovakia), (General Assembly Doc. A/A43/905, 30th November 1988) para 1. The plenary meeting was introduced by Malta's Foreign Minister Dr V. Tabone.
- 6 *Ibid.* para 2; *vide* also Docs. A/Cf. 2/43/SR. 21-26, 30, and 44.
- 7 *Vide* statement by Professor G.O.P. Obasi Secretary General of the W.M.O. to the Intergovernmental Panel on Climate Change dated 9th November 1988.
- 8 *Vide* Report of the Rapporteur, pp.4 and 5.
- 9 General Assembly Doc A/RES/43/53, 27th January 1989.

III. RESOLUTION 43/53

- 1 Statement by D. J. Attard to the Second Committee (27th October 1988) (Press Release No. 3059. (Dept. of Information, Malta).
- 2 *Vide*, in particular, the *World Climate Programme* approved by the W.M.O., and the U.N.E.P. *Environment Programme* (1990-1995), (*Official Records of the General Assembly*, 43rd Session No. 25 (A/A43/25), Annex Decision S5.1/3). The work of the International Council of Scientific Unions and the Beijer Institute (Stockholm) has also to be considered. The work undertaken by the scientific community culminated in the 1985 Villach *Conference on Climate Change and Related Matters*.
- 3 Attard D.J., *Climate Change* (The Foundation for International Studies, Malta 1989).
- 4 Hereinafter referred to as the I.P.C.C., *vide* Para. 5.
- 5 *Vide* Para. 6.
- 6 *Vide* W.M.O./U.N.E.P.: *Report of the First Session of the I.P.C.C. Bureau* (6th to 7th February 1989, Geneva) (*World Climate Programme Publications*, Series TD-No 294).
- 7 *Ibid.* pp. 3 - 4.
- 8 *Ibid.* pp. 5 - 6.
- 9 *Ibid.* pp. 6 - 7; Malta was elected as one of the Group's vicechairmen.
- 10 In an earlier Maltese draft of the Resolution circulated in October 1989, the word "possible" qualified "elements" not "a convention". This change was necessary as a number of delegations, including the U.K. and the U.S., were unable to accept the Maltese draft which could imply that the those of General Assembly approved the conclusion of a climate convention.

IV. CANADIAN INITIATIVES

- 1 Held in Toronto between the 27th and 30th June 1988.
- 2 *Conference Statement* (1988) p.12.
- 3 *Vide, Statement of the International Meeting of Legal and Policy Experts on the Protection of the Atmosphere.* (22nd February 1989) pp. 1 - 2.
- 4 *Vide* below section (viii) *Other International Fora*: Canada and Malta have presented a joint study on the elements of a climate convention.

V. DECLARATION OF THE HAGUE

- 1 *Vide* Preamble 2.
- 2 Para. 2.
- 3 *Ibid.*
- 4 Para. 11.
- 5 Para. 6.
- 6 *Ibid.*
- 7 It has been reported that the U.K. refused to participate in the Hague Summit because it strongly opposed *inter alia* the establishment of a new international institution.
- 8 Para. 10(a).
- 9 *Ibid.*
- 10 Para. 7.
- 11 *Ibid.*
- 12 Paras. 8 and 10 (d).

U.N.E.P.

- Amongst the U.N. specialist agencies which are concerned with the issue of climate change are U.N.E.S.C.O. (through I.O.C.), W.H.O. (conducts studies on health and climate change); F.A.O. (conducts studies on the impact of climate change on agriculture); and I.A.E.A. (conducts studies on energy policies and their impact on climate). The World Bank and U.N.D.P. are also supporting efforts in this field (*vide* General Assembly Doc. A/44/484 of 19th September 1989).
- 2 A parallel resolution was adopted in June 1989 by the forty-first meeting of the W.M.O. Executive Council, *vide EC-XLI Resolution 4*.
 - 3 *Vide* the Preamble.
 - 4 Para. 3.
 - 5 Para. 7; *vide Report of the First Session of the I.P.C.C.* (Doc. No. I.P.C.C. - 1/TD-No. 267), Paras. 3.2 and 3.3.
 - 6 Para. 9.
 - 7 Para. 10.
 - 8 The author was nominated by UNEP to participate in this "task force". The first meeting was held on the 25th October 1989 in New York.
 - 9 *EC-XLI Resolution 4*.
 - 10 *Ibid.*
 - 11 *Ibid.*

VII. OTHER INTERNATIONAL FORA

- 1 *Vide* Press Release issued by the U.N. Centre for Science and Technology For Development (10th November 1988).
- 2 Final Conclusion in the *Hamburg Congress Report*. The proceedings of the Congress will be published as a U.N. Sales Publication.
- 3 *Ibid.*
- 4 *Ibid.*, Section 2.4(5) *The Concerns of the N.G.O.'s*.
- 5 18 *I.L.M.* (1979), p. 1442.
- 6 *Congress Report*. Sections 2.2(3), 2.4(5).

- 7 *International Conference on Global Warming and Climate Change: Perspectives From Developing Countries* (Tata Energy Research Institute/Woods Hole Research Centre, U.N.E.P. and the World Resources Institute).
- 8 *Conference Statement* (edited by the Tata Energy Research Institute and distributed by the Woods Hole Research Centre), Section 5.3.
- 9 *Ibid.*
- 10 *Ibid.*
- 11 *Ibid.*
- 12 26 *I.L.M.* (1987), pp. 1516 et.
- 13 26 *I.L.M.* (1987), pp. 1541 et.
- 14 *Vide*, generally, Brunnée, S.: *Acid Rain and Ozone Layer Depletion* 61988).
- 15 The Conference held between the 5th and the 7th March, 1989 was attended by 123 states, (*vide* U.N.E.P./Oz.L.Pro.1/5, para. 11).
- 16 U.N.E.P./Oz.L.Pro.1/5, Appendix 1.
- 17 The decision was approved at the 1989 meeting of the U.N.E.P. Governing Council, *vide* para. 11(a).
- 18 *Ibid.*
- 19 *Resolution on the Environment* adopted in Dakar on the 23rd May 1989.
- 20 The Summit of the Arch was convened in Paris on the 16th July 1989.
- 21 *Economic Declaration*, Para. 45.
- 22 *Ibid.*
- 23 *Ibid.*
- 24 *Vide*, in particular, Paras. 3, 5 and 6.
- 25 Para. 3.
- 26 Para. 8.
- 27 *Ibid.*
- 28 *Climate Change: Meeting the Challenge* (Commonwealth Secretariat, September 1989).
- 29 *Ibid.* pp. 1 et.
- 30 *Ibid.* pp. 10, 114.
- 31 *Ibid.* p. 19.
- 32 *Ibid.* p. 114.
- 33 *Ibid.*
- 34 *Ibid.*
- 35 Held on the 6th and 7th November 1989. The *Noordwijk Declaration* is reproduced in a *Press Release* (11th November 1989) issued by the Dept. of information, Malta.
- 36 *Vide Declaration*, Para. 16.
- 37 *Ibid* Para. 29 (1); *vide supra*. Section VI.
- 38 *Ibid* Para. 29 (5).
- 39 *Ibid* Para. 29 (6).
- 40 *Ibid.*
- 41 *Commonwealth Experts Group Report*, (1989) p. 36, *Vide Male Declaration* preamble, para. 2.

VIII. MALTA'S VIEWS ON THE LEGAL REGIME TO PROTECT GLOBAL CLIMATE

- 1 *Press Release* (Dept. of Information, Malta), 27th October 1988. *Vide* also, the Statement to the first meeting of I.P.C.C., 9th November 1988.

IX. COMMON CONCERN OF MANKIND

- 1a Address, 24th October, 1988, Department of Information, Malta.
- 1 *Trail Smelter Arbitration*, (U.S.A. vs Canada) (1938, 1941) 3 *R.I.A.A.*, 1911.
- 2 I.C.J. Report (1949) 4.
- 3 *Lake Lanoux Arbitration*, (France vs Spain), 12 *R.I.A.A.*, 281.
- 4 *Op. cit.*, p.1965.
- 5 *Vide*, eg. the *General Assembly Resolution No. 2995 on Co-operation between States in the Field of Environment* (15th December, 1972) which requires States, in utilising their natural

resources, not to produce "significant harmful effects" in zones situated outside their national jurisdiction. Also, Principle 3 of the 1978 *UNEP Draft Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilisation of Natural Resources Shared by Two or More States* (17 *I.L.M.* (1978), p. 1907).

- 6 *Vide*, eg. the 1983 Mexico/U.S. *Agreement to Co-operate in the Solution of Environmental Problems in the Border Areas* (22 *I.L.M.* (1983), p.1025) and the 1979 *Convention on Long-Range Transboundary Air Pollution* (18 *I.L.M.* (1979) p. 1442).
- 7 21 *I.L.M.* (1982) p. 1261.
- 8 *Vide* sections entitled *Legal Dimensions*, and *Climate Warming*.
- 9 Para. 6.
- 10 United Nations General Assembly Doc. A/44/1, 12th September, 1989, p. 22.
- 11 Address referred to in foot note (1a).
- 11a The Male' Declaration on Global Warming and Sea-level Rise refers to climate change, global warming and sea-level rise as "common concern of mankind".
- 12 *P.C.I.J.* B. 4 (1923), p.23.
- 13 For a detailed analysis see forthcoming study by the author entitled *The International Regime to Protect Global Climate* (1990).
- 14 Para. 1.
- 15 *Vide* foot note (1a).
- 16a *Vide* Howell, "Domestic Questions in International Law", 48 *Proc.A.S.I.L.* (1954), p.90.
- 16 Statement made on the 17th October, 1989, by R. Smith, Head of the U.S. delegation, U.S. Department, Press Release (EYR 206 - 17th October, 1989).
- 17 Resolution 43/53, para.2.
- 18 Address at a dinner in honour of Professor G.O.P. Obasi, Secretary General of W.M.O., 1st February, 1989, Department of Information, Malta.
- 19 Address at a dinner in honour of Dr M. Tolba, Executive Director of UNEP, 17th December, 1988, Department of Information, Malta.
- 20 Keynote address *Implementation of the Law of the Sea Convention Regional Approaches*, Inauguration of Class C: Management of the Mediterranean (I.O.I., Malta, 2nd October, 1989).
- 21 *Vide*, *Background Paper on Funding Mechanisms* (October 1989) prepared by McKinsey & Company Inc. in *Proceedings of the Ministerial Conference on Atmospheric Pollution and Climate Change* (Netherlands, 6-7 November, 1989).
- 22 *Vide*, an interesting *Background Paper on Climate, Environment and Development* prepared by J. Van Ettinger et al in *Proceeding of the Ministerial Conference on Atmospheric Pollution and Climate Change* (Netherlands, 6-7 November, 1989).
- 23 Statement to the ECOSOC Meeting; text issued by the U.K. Mission to the U.N., 6th July, 1989.
- 24 *I.C.J. Reports* (1970), para. 34.
- 25 *Vide*, U.N. General Assembly Doc. A/C 2/44/L.41 of 15th November, 1989; the Maltese draft resolution was co-sponsored by another four States at the time of its first presentation.
- 26 The Draft Resolution is still being discussed in the Second Committee.
- 27 Article 19(3).

CONCLUSION

- 1 *Vide*, *Sunday Times* (Malta), 3rd December 1989; *vide* also White House Fact Sheet EUR105, 4th December, 1989.
- 2 *Vide* Parliamentary Report, *The Times* (London) 11th November 1989.
- 3 *House of Lords Select Committee on Science and Technology. Sixth Report. Greenhouse Effect* 27th November 1989 (HMSO). A similar approach was taken at the first meeting (25th October 1989) of the joint UNEP/WMO Task Force set up to advise on preparations for negotiations leading to a climate convention. In its view, negotiations should begin after the adoption of the IPCC "interim report" in September 1990. The Task Force was of the view that a draft convention could be elaborated, and ready for adoption by at the earliest October 1991. It identified two areas where concrete action and measures could be taken: improving energy efficiency and forestation.

ANNEX 1**RESOLUTION ADOPTED BY THE GENERAL ASSEMBLY
on the report of the Second Committee (A/43/905)****43/53. Protection of global climate for present and future generations of mankind****The General Assembly**

Welcoming with appreciation the initiative taken by the Government of Malta in proposing for consideration by the Assembly the item entitled "Conservation of climate as part of the common heritage of mankind,"

Concerned that certain human activities could change global climate patterns, threatening present and future generations with potentially severe economic and social consequences,

Noting with concern that the emerging evidence indicates that continued growth in atmospheric concentrations of "greenhouse" gases could produce global warming with an eventual rise in sea levels, the effects of which could be disastrous for mankind if timely steps are not taken at all levels,

Recognizing the need for additional research and scientific studies into all sources and causes of climate change,

Concerned also that emissions of certain substances are depleting the ozone layer and thereby exposing the earth's surface to increased ultra-violet radiation, which may pose a threat to, *inter alia*, human health, agricultural productivity and animal and marine life, and reaffirming in this context the appeal, contained in its resolution 42/182 of 11 December 1987, to all States that have not yet done so to consider becoming parties to the Vienna Convention for the Protection of the Ozone Layer, adopted on 22 March 1985, and the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted on 16 September 1987, as soon as possible,

Recalling its resolutions 42/186 and 42/187 of 11 december 1987 on the Environmental Perspective to the Year 2000 and Beyond and on the report of the World Commission on Environment and Development, respectively,

Convinced that changes in climate have an impact on development, *Aware* that a considerable amount of valuable work, particularly at the scientific level and in the legal field, has already been initiated on climate change, in particular by the United Nations Environment Programme, the World Meteorological Organization and the International Council of Scientific Unions and under the auspices of Individual States,

Welcoming the convening in 1990 of a second World Climate Conference,

Recalling also the conclusions of the meeting held at Villach, Austria, in 1985, ¹ which *inter alia*, recommended a programme on climate change to be promoted by Governments and the scientific community with the collaboration of the Worl Meteorological Organization, the United Nations Environment Programme and the International Council of Scientific Unions,

Convinced that climate change effects humanity as a whole and should be confronted withing a global framework so as to take into account the vital interests of all mankind,

1. *Recognizes* that climate change is a common concern of mankind, since climate is an essential condition which sustains life on earth;

2. *Determines* that necessary and timely action should be taken to deal with climate change within a global framework;

3. *Reaffirms* its resolution 42/184 of 11 December 1987, in which, *inter alia*, it agreed with the Governing Council of the United Nations Environment Programme that the Programme should attach importance to the problem of global climate change and that the Executive Director of the United Nations Environment Programme should ensure that the Programme co-operates closely with the World Meteorological Organization and the International Council of Scientific Unions and maintains an active, influential role in the World Climate Programme;

4. *Considers* that activities in support of the World Climate Programme, approved by the Congress and Executive Council of the World Meteorological Organization and elaborated in the system-wide medium-term environment programme for the period 1990-1995, which was approved by the Governing Council of the United Nations Environment Programme,² be accorded high priority by the relevant organs and programmes of the United Nations system;

5. *Endorses* the action of the World Meteorological Organization and the United Nations Environment Programme in jointly establishing an Intergovernmental Panel on Climate Change to provide internationally co-ordinated scientific assessments of the magnitude, timing and potential environmental and socio-economic impact of climate change and realistic response strategies, and expresses appreciation for the work already initiated by the panel;

6. *Urges* Governments, intergovernmental and non-governmental organizations and scientific institutions to treat climate change as a priority issue, to undertake and promote specific, co-operative action-oriented programmes and research so as to increase understanding on all sources and causes of climate change, including its regional aspects and specific time-frames as well as the cause and effect relationship of human activities and climate, and to contribute, as appropriate, with human and financial resources to efforts to protect the global climate;

7. *Calls upon* all relevant organizations and programmes of the United Nations system to support the work of the Intergovernmental Panel on Climate Change;

8. *Encourages* the convening of conferences on climate change, particularly on global warming, at the national, regional and global levels in order to make the international community better aware of the importance of dealing effectively and in a timely manner with all aspects of climate change resulting from certain human activities;

9. *Calls upon* Governments and intergovernmental organizations to

1. See *United Nations Environment Programme, Annual Report of the Executive Directors 1985* (UNEP/GC.14/2), chap. IV, paras. 138-140.

2. See *Official Records of the General Assembly, Forty-third Session, Supplement No. 25* (A/43/25), annex, decision SS.I/3.

collaborate in making every effort to prevent detrimental effects on climate and activities which affect the ecological balance, and also calls upon non-governmental organizations, industry and other productive sectors to play their due role;

10. *Requests* the Secretary-General of the World Meteorological Organization and the Executive Director of the United Nations Environment Programme, through the Intergovernmental Panel on Climate Change, immediately to initiate action leading, as soon as possible, to a comprehensive review and recommendations with respect to:

- (a) The state of knowledge of the science of climate and climatic changes;
- (b) Programmes and studies on the social and economic impact of climate change, including global warming;
- (c) Possible response strategies to delay, limit or mitigate the impact of adverse climate change;
- (d) The identification and possible strengthening of relevant existing international legal instruments having a bearing on climate;
- (e) Elements for inclusion in a possible future international convention on climate;

11. *Also requests* the Secretary-General to bring the present resolution to the attention of all Governments, as well as intergovernmental organizations, non-governmental organizations in consultative status with the Economic and Social Council and well-established scientific institutions with expertise in matters concerning climate;

12. *Further requests* the Secretary-General to report to the General Assembly at its forty-fourth session on the implementation of the present resolution;

13. *Decides* to include this question in the provisional agenda of its forty-fourth session, without prejudice to the application of the principle of biennialization.

*70th plenary meeting
6 December 1988*

ANNEX 2**DECLARATION OF THE HAGUE****(11th March 1989)**

The right to live is the right from which all other rights stem. Guaranteeing this right is the paramount duty of those in charge of all States throughout the world.

Today, the very conditions of life on our planet are threatened by the severe attacks to which the earth's atmosphere is subjected.

Authoritative scientific studies have shown the existence and scope of considerable dangers linked in particular to the warming of the atmosphere and to the deterioration of the ozone layer. The latter has already led to action, under the 1985 Vienna Convention for the Protection of the Ozone Layer and the 1987 Montreal Protocol, while the former is being addressed by the Intergovernmental Panel on Climatic Change established by UNEP and WMO, which has just begun its work. In addition the UN General Assembly adopted Resolution 43/53 on the Protection of the Global Climate in 1988, recognizing climate change as a common concern of mankind.

According to present scientific knowledge, the consequences of these phenomena may well jeopardize ecological systems as well as the most vital interests of mankind at large.

Because the problem is planet-wide in scope, solutions can only be devised on a global level. Because of the nature of the dangers involved, remedies to be sought involve not only the fundamental duty to preserve the ecosystem, but also the right to live in dignity in a viable global environment, and the consequent duty of the community of nations vis-à-vis present and future generations to do all that can be done to preserve the quality of the atmosphere.

Therefore we consider that, faced with a problem the solution to which has three salient features, namely that it is vital, urgent and global, we are in a situation that calls not only for implementation of existing principles but also for a new approach, through the development of new principles of international law including new and more effective decision-making and enforcement mechanisms.

What is needed here are regulatory, supportive and adjustment measures that take into account the participation and potential contribution of countries which have reached different levels of development. Most of the emissions that affect the atmosphere at present originate in the industrialized nations. And it is in these same nations that the room for change is greatest, and these nations are also those which have the greatest resources to deal with this problem effectively.

The international community and especially the industrialized nations have special obligations to assist developing countries which will be very negatively affected by changes in the atmosphere although the responsibility of many of them for the process may only be marginal today.

Financial institutions and development agencies, be they international or domestic, must coordinate their activities in order to promote sustainable development.

Without prejudice to the international obligations of each State, the signatories acknowledge and will promote the following principles:

- (a) The principle of developing, within the framework of the United Nations, new institutional authority, either by strengthening existing institutions or by creating a new institution, which, in the context of the preservation of the earth's atmosphere, shall be responsible for combating any further global warming of the atmosphere and shall involve such decision-making procedures as may be effective even if, on occasion, unanimous agreement has not been achieved;
- (b) The principal that this institutional authority undertake or commission the necessary studies, be granted appropriate information upon request, ensure the circulation and exchange of scientific and technological information - including facilitation of access to the technology needed - develop instruments and define standards to enhance or guarantee the protection of the atmosphere and monitor compliance herewith;
- (c) The principle of appropriate measures to promote the effective implementation of and compliance with the decisions of the new institutional authority, decisions which will be subject to control by the International Court of Justice;
- (d) The principle that countries to which decisions taken to protect the atmosphere shall prove to be an abnormal or special burden, in view, inter alia, of the level of their development and actual responsibility for the deterioration of the atmosphere, shall receive fair and equitable assistance to compensate them for bearing such burden. To this end mechanisms will have to be developed;
- (e) The negotiation of the necessary legal instruments to provide an effective and coherent foundation, institutionally and financially, for the aforementioned principles.

The Heads of State and Government or their representatives, who have expressed their endorsement of this Declaration by placing their signatures under it, stress their resolve to promote the principles thus defined by:

- furthering the development of their initiative within the United Nations and in close coordination and collaboration with existing agencies set up under the auspices of the United Nations;
- inviting all States of the world and the international organisations competent in this field to join in developing, taking into account studies by the IPCC, the framework conventions and other legal instruments necessary to establish institutional authority and to implement the other principles stated above to protect the atmosphere and to counter climate change, particularly global warming;
- urging all States of the world and the international organisations competent in this field to sign and ratify conventions relating to the protection of nature and the environment;
- calling upon all States of the world to endorse the present declaration.

The original of this Declaration, drawn up in French and English, will be transmitted to the Government of the Kingdom of the Netherlands, which will retain it in its archives. Each of the participating States will receive from the Government of the Kingdom of the Netherlands a true copy of this Declaration.

The Prime Minister of the Netherlands is requested to transmit the text of this Declaration, which is not eligible for registration under Article 102 of the Charter of the United Nations, to all members of the United Nations.
The Hague, 11 March 1989

Félix Houphouët-Boigny
Président de la République de Côte d'Ivoire
President of the Republic of Côte d'Ivoire

Muhammed Hosni Mubarak
Président de la République Arabe d'Égypte
President of the Arab Republic of Egypt

Felipe González
Premier Ministre d'Espagne
Prime Minister of Spain

François Mitterrand
Président de la République Française
President of the French Republic

Daniel Torotich arap Moi
Président de la République du Kenya
President of the Republic of Kenya

Edward Fench Adami
Premier Ministre de la République de Malte
Prime Minister of the Republic of Malta

Gro Harlem Brundtland
Premier Ministre du Royaume de Norvège
Prime Minister of the Kingdom of Norway

Geoffrey Palmer
Vice-Ministre Président de Nouvelle-Zélande
Deputy Prime Minister of New Zealand

Ruud Lubbers
Premier Ministre du Royaume des Pays-Bas
Prime Minister of the Kingdom of the Netherlands

Abdou Diouf

Président de la République du Sénégal

President of the Republic of Senegal

Enrique Colmenares Finol

Ministre de l'Environnement de la République du Venezuela

Minister for Environment of the Republic of Venezuela

Robert Gabriel Mugabe

Président de la République du Zimbabwe

President of the Republic of Zimbabwe

ANNEX 3**15/36. Global climate change****The Governing Council**

Recalling its decision 14/20 of June 1987 on global climate change,

Recognizing that while further scientific studies are important, the knowledge and awareness of global climate change and its possible consequences are developing rapidly,

Emphasizing that the scientific participation of developing countries and therefore the development of their intellectual resources is essential to understanding of the state of the atmosphere and climate change for the world as a whole,

Emphasizing further the importance of discussing the whole range of climate-related measures on a broad international basis,

Recognizing also the expressions of readiness on the part of a growing number of States to act decisively to protect the global climate,

Conscious Conclusion of General Assembly resolution 43/53 of 6 December 1988, entitled "Protection of global climate for present and future generations of mankind", which recognized that climate change is a common concern of mankind and determined that necessary and timely action should be taken to deal with climate change within a global framework, and requested the Executive Director of the United Nations Environment Programme and the Secretary-General of the World Meteorological Organization to utilize the Intergovernmental Panel on Climate Change to initiate that action,

Noting that the heads of State or of Government of States members of the European Communities, meeting at Rhodes in December 1988, underlined the need for an effective international response to global environment problems such as climate change,

Noting the report of the International Meeting of Legal and Policy Experts on the Protection of the Atmosphere, held in Ottawa in February 1989, in which an international convention or conventions with appropriate protocols was recommended as a means to ensure rapid international action to protect the atmosphere and limit the rate of climate change.⁸²

Recalling the Chairman's message from the London Conference on Saving the Ozone Layer, which met from 5 to 7 March 1989 and was attended by 123 countries, which, *inter alia*, noted that action to protect the ozone layer will at the same time reduce the impact of global warming, which poses particularly serious threats to certain low-lying developing countries,⁸³

Noting that representatives of twenty four States at the highest political level adopted in The Hague on 11 March 1989 a declaration on the threats to the atmosphere, particularly the warming of the atmosphere and the deterioration of the ozone layer,

82. See *Protection of the Atmosphere: International Meeting of Legal and Policy Experts, 20-22 February 1989, Ottawa, Ontario, Canada*, "Statement of the Meeting of Legal and Policy Experts; introduction.

83. UNEP/OzL. Pro1/5, para. 11.

Noting the initiatives of the Governments of the Netherlands and of Norway with regard to the establishment of a world climate fund and their willingness to contribute to such a fund,

Also noting the ongoing work of the Intergovernmental Panel on Climate Change on financial measures to implement strategies to respond to climate change,

Encouraging Governments and relevant international organizations to further the development of international funding mechanisms, not excluding a possible climate fund, for additional assistance, in particular to developing countries, for the implementation of national and international policies to protect the environment from climate change.

Noting further the Declaration by eighty-two countries and the European Communities in Helsinki on 2 May 1989 ⁸⁴ in which they, mindful that some ozone-depleting substances are powerful greenhouse gases leading to global warming, agree to phase out the production and the consumption of chlorofluorocarbons controlled by the Montreal Protocol as soon as possible but not later than the year 2000, taking due account of the special situation of developing countries,

Emphasizing that the Montreal Protocol, as amended from time to time, is the legal instrument available to its Parties by which the production and consumption of ozone-depleting substances are to be controlled.

Emphasizing that, within the perspective of protection of the atmosphere, new measures to counteract global warming are required.

1. *Notes with satisfaction* the establishment of the Intergovernmental Panel on Climatic Change by the Secretary-General of the World Meteorological Organization and the Executive Director of the United Nations Environment Programme upon appropriate decisions by the Executive Council of the World Meteorological Organization and the Governing Council of the United Nations Environment Programme as an *ad hoc* intergovernmental working group;

2. *Requests* the Executive Director of the United Nations Environment Programme, in full collaboration with the Secretary-General of the World Meteorological Organization, to consult with the Intergovernmental Panel on Climate Change with respect to the determination of its internal organization and procedures, its budget and means of financing such budget;

3. *Authorizes* the Executive Director of United Nations Environment Programme to continue to give strong support to the work of the Intergovernmental Panel on Climate Change;

4. *Urges* all Member States of the United Nations, its specialized agencies and international organizations, including the International Atomic Energy Agency, as well as relevant intergovernmental and non-governmental organizations, to support fully and participate actively in the work of the Intergovernmental Panel on Climate Change;

5. *Urges* the Intergovernmental Panel on Climate Change to take the necessary steps to ensure the scientific and policy participation of developing countries in its work and *recommends* the international community to provide assistance in this respect;

84. Ibid., appendix I.

6. *Notes* the agreement within the intergovernmental Panel on Climate Change, as reflected in paragraph 10 of General Assembly resolution 43/53, that its work include the following main tasks, each to be accomplished by a Working Group;

- (a) Assessment of available scientific information on climatic change;
- (b) Assessment of environmental and socio-economic impacts of climate change;
- (c) The formulation of response strategies;⁸⁵

7. *Further notes* the intention of the Intergovernmental Panel on Climatic Change to adopt an interim report not later than October 1990;⁸⁶

8. *Notes* the agreement of the Response Strategies Working Group of the Intergovernmental Panel on Climate Change at a meeting held in Geneva from 10 to 12 May 1989, that its workplan includes the identification and evaluation of a range of measures to implement response strategies, namely legal measures, including the elements of a possible future framework convention on climate change, technological measures, financial measures, economic measures and educational measures;

9. *Requests* the Executive Director of United Nations Environment Programme, in co-operation with the Secretary-General of World Meteorological Organization, to begin preparations for negotiations on a framework convention on climate, taking into account the work of the Intergovernmental Panel on Climate Change, as well as the outcome of recent and forthcoming international meetings on the subject;

10. *Recommends* that such negotiations should be initiated as soon as possible immediately after the adoption of the interim report of the Intergovernmental Panel on Climatic Change;

11. *Recommends* that Governments and competent regional integration economic organizations consider, while awaiting the outcome of the negotiations, the range of possible options for averting the potentially damaging impacts of climate change, for removing the causes of the phenomenon, and for developing programmes for implementing those more appropriate to national needs, including, *inter alia*, to;

- (a) Accede to the Montreal Protocol on Substances that Deplete the Ozone Layer, if they have not yet done so, and comply with its regulatory measures with the utmost speed, adopting and applying, where possible, more stringent controls than those specified in the Protocol in the shortest possible time with an ultimate objective of, as far as possible, completely eliminating the emission of the controlled substances to better protect the ozone layer and the global climate from change, consistent with the Helsinki Declaration on the Protection of the Ozone Layer;

85. Report of the First Session of the Intergovernmental Panel on Climatic Change, (World Meteorological Organization/United Nations Environment Programme, *World Climate Programme Publications Series* No. IPCC-1TD-No.267 paras. 3.2 and 3.3.

86. *Ibid.*, paras. 3.12 and 4.3.

- (b) Combat deforestation and accelerate reforestation and afforestation programmes to provide a natural bank for atmospheric carbon in terrestrial ecosystems;
- (c) Promote programmes to improve energy efficiency and energy conservation in both the supply and use sectors of national economies, setting goals and objectives as appropriate;
- (d) Adopt in industrialized countries strategies for actions, including use of regulations and technologies as appropriate, designed to control, stabilize and reduce national emissions of greenhouse gases through more efficient use of energy in both the production and consumption sectors of national economies, setting goals and objectives as appropriate, with, as a first step, the goal of stabilization of emissions of carbon dioxide and other greenhouse gases, and the development of energy sources that do not emit greenhouse gases which threaten global climate;
- (e) Adopt in developing countries similar strategies for actions which, while not impeding the impetus of their development, make optimal use of energy production and consumption systems that are safe, affordable and efficient and that minimize emissions of greenhouse gases, which threaten global climate;
- (f) Identify and possibly strengthen relevant existing international legal instruments having a bearing on global climate change;

12. *Recommends* the institution of programmes and measures of assistance, including technology transfer, that will make it possible for developing countries to avoid risk to global climate;

13. *Recommends* that Governments, taking note of the need for scientific knowledge of global, regional and local climates and their impacts, continue and, wherever possible, increase their activities in support of the World Climate Programme and International Geosphere-Biosphere Programmes, including the monitoring of atmospheric composition and climatic conditions, and *further recommends* that the international community support efforts by developing countries to participate in these scientific activities.

ANNEX 4

HELSINKI DECLARATION
(on the protection of the ozone layer)
2 May 1989

**The Governments and the European Communities represented at the First
Meetings of the Parties to the Vienna Convention and
the Montreal Protocol**

Aware of the wide agreement among scientists that depletion of the ozone layer will threaten present and future generations unless more stringent control measures are adopted,

Mindful that some ozone depleting substances are powerful greenhouse gases leading to global warming,

Aware also of the extensive and rapid technological development of environmentally acceptable substitutes for the substances that deplete the ozone layer and the urgent need to facilitate the transfer of technologies of such substitutes especially to developing countries,

Encourage all states that have not done so to join the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol,

Agree to phase out the production and the consumption of CFC's controlled by the Montreal Protocol as soon as possible but not later than the year 2000 and for that purpose to tighten the timetable agreed upon in the Montreal Protocol taking due account of the special situation of developing countries,

Agree to both phase out halons and control and reduce other ozone-depleting substances which contribute significantly to ozone depletion as soon as feasible,

Agree to commit themselves, in proportion to their means and resources, to accelerate the development of environmentally acceptable substituting chemicals, products and technologies,

Agree to facilitate the access of developing countries to relevant scientific information, research results and training and to seek to develop appropriate funding mechanisms to facilitate the transfer of technology and replacement of equipment at minimum cost to developing countries.

ANNEX 5**FRANCOPHONE SUMMIT
RESOLUTION ON THE ENVIRONMENT**

Adopted in Dakar, 23 May 1989

The Heads of State, Government and Delegations of countries which use French as a common language,

Concerned over the environmental crisis that the world is presently experiencing and that is manifesting itself on a global scale through various phenomena, including deterioration of the ozone layer, atmospheric warming, deforestation, desertification, soil exhaustion, water and atmospheric pollution, toxic wastes, poaching, acid rain and the transfer of hazardous wastes to developing countries;

Convinced that the growth of all countries, notably the developing ones, can be guaranteed only by economic development based on policies of environmental protection and conservation;

Recognizing that all the world's countries must observe the existing standards and principles, and also that new principles of international law must be defined in this area;

Observing the significant progress achieved in international cooperation on environmental questions, particularly the conclusions of the Vienna Convention on protection of the ozone layer and of the Montreal Protocol on substance that deplete the ozone layer as well as the creation of the Intergovernmental Panel on Climate Change, and the Ottawa Meeting of legal and policy experts on the protection of the atmosphere;

Noting that the Heads of State and Government assembled at The Hague on March 11, 1989, affirmed the vital, urgent and global need for solutions to these problems by the adoption of innovative principles of international law relating to both the decision-making process and to development assistance and the development, within the framework of the United Nations, of new institutional authority, either by strengthening existing institutions, or by creating a new institution;

Agree that the perservation of life on our planet in its various forms is the responsibility of all nations and all peoples;

- that all the participants in the development process should place priority on measures conducive to economic development which respects the environment;
- that the atmosphere and the oceans are common resources of inestimable value which must be managed and protected with the greatest possible care from all forms of abuse;
- that the existing international institutions in the United Nations system responsible for environmental questions and for protection of the climate and of the biosphere must be reinforced;
- that efforts must be pursued to completely eliminate controlled chloroflouorocarbons (CFCs) by 1999 at the latest;
- that there is a need to draft and implement an energy strategy which would

facilitate the mastery and large-scale utilization of non-polluting renewable energy forms, notably solar energy;

- that human activities which contribute to deforestation, desertification and the destruction of arable lands must receive special attention, and that policies must be devised to restore the damaged regions.

Support the concept of sustainable development, as defined by the World Commission on Environment and Development, to affirm the interdependence of the economy and the environment;

Are pleased to note that a United Nations Conference on environment and development will be held in 1992;

Invite all governments to endorse the Declaration of The Hague on the Environment.

ANNEX 6**EXTRACT FROM THE SUMMIT OF THE ARCH
ECONOMIC DECLARATION****16 July 1989****Environment**

33. There is a growing awareness throughout the world of the necessity to preserve better the global ecological balance. This includes serious threats to the atmosphere, which could lead to future climate changes. We note with great concern the growing pollution of air, lakes, rivers, oceans and seas; acid rain, dangerous substances; and the rapid desertification and deforestation. Such environmental degradation endangers species and undermines the well-being of individuals and societies.

Decisive action is urgently needed to understand and protect the earth's ecological balance. We will work together to achieve the common goals of preserving a healthy and balanced global environment in order to meet shared economic and social objectives and to carry out obligations to future generations.

34. We urge all countries to give further impetus to scientific research on environmental issues, to develop necessary technologies and to make clear evaluations of the economic costs and benefits of environmental policies.

The persisting uncertainty on some of these issues should not unduly delay our action.

In this connection, we ask all countries to combine their efforts in order to improve observation and monitoring on a global scale.

35. We believe that international cooperation also needs to be enhanced in the field of technology and technology transfer in order to reduce pollution or provide alternative solutions.

36. We believe that industry has a crucial role in preventing pollution at source, in waste minimization, in energy conservation, and in the design and marketing of cost-effective clean technologies. The agricultural sector must also contribute to tackling problems such as water pollution, soil erosion and desertification.

37. Environmental protection is integral to issues such as trade, development, energy, transport, agriculture and economic planning. Therefore, environmental considerations must be taken into account in economic decision-making. In fact good economic policies and good environmental policies are mutually reinforcing.

In order to achieve sustainable development, we shall ensure the compatibility of economic growth and development with the protection of the environment. Environmental protection and related investment should contribute to economic growth. In this respect, intensified efforts for technological breakthrough are important to reconcile economic growth and environmental policies.

Clear assessments of the costs, benefits and resource implications of environmental protection should help governments to take the necessary decisions on the mix of price signals (e.g., taxes or expenditures) and regulatory actions, reflecting where possible the full value of natural resources.

We encourage the World Bank and regional development banks to integrate environmental considerations into their activities. International organizations such as the OECD and the United Nations and its affiliated organizations, will be asked to develop further techniques of analysis which would help governments assess appropriate economic measures to promote the quality of the environment. We ask the OECD, within the context of its work on integrating environment and economic decision-making, to examine how selected environmental indicators could be developed. We expect the 1992 UN Conference on Environment and Development to give additional momentum to the protection of the global environment.

38. To help developing countries deal with past damage and to encourage them to take environmentally desirable action, economic incentives may include the use of aid mechanisms and specific transfer of technology. In special cases, ODA debt forgiveness and debt for nature swaps can play a useful role in environmental protection.

We also emphasize the necessity to take into account the interests and needs of developing countries in sustaining the growth of their economies and the financial and technological requirements to meet environmental challenges.

39. The depletion of the stratospheric ozone layer is alarming and calls for prompt action.

We welcome the HELSINKI conclusions related, among other issues, to the complete abandonment of the production and consumption of chloro-fluorocarbons covered by the MONTREAL protocol as soon as possible and not later than the end of the century. Specific attention must also be given to those ozone-depleting substances not covered by the Montreal protocol. We shall promote the development and use of suitable substitutes substances and technologies. More emphasis should be placed on projects that provide alternatives to chloro-fluorocarbons.

40. We strongly advocate common efforts to limit emissions of carbon dioxide and other greenhouse gases, which threaten to induce climate change, endangering the environment and ultimately the economy. We strongly support the work undertaken by the Intergovernmental Panel on Climate Change, on this issue.

We need to strengthen the worldwide network of observatories for greenhouse gases and support the World Meteorological Organisation initiative to establish a global climatological reference network to detect climate changes.

41. We agree that increasing energy efficiency could make a substantial contribution to these goals. We urge international organizations concerned to encourage measures, including economic measures, to improve energy conservation and, more broadly, efficiency in the use of energy of all kinds and to promote relevant techniques and technologies.

We are committed to maintaining the highest safety standards for nuclear power plants and to strengthening international cooperation in safe operation of power plants and waste management, and we recognize that nuclear power also plays an important role in limiting output of greenhouse gases.

42. Deforestation also damages the atmosphere and must be reversed. We call for the adoption of sustainable forest management practices, with a view

to preserving the scale of world forests. The relevant international organizations will be asked to complete reports on the state of the world's forests by 1990.

43. Preserving the tropical forests is an urgent need for the world as a whole. While recognizing the sovereign rights of developing countries to make use of their natural resources, we encourage, through a sustainable use of tropical forests, the protection of all the species therein and the traditional rights to land and other resources of local communities. We welcome the German initiative in this field as a basis for progress.

To this end, we give strong support to rapid implementation of the Tropical Forest Action Plan which was adopted in 1986 in the framework of the Food and Agricultural Organisation. We appeal to both consumer and producer countries, which are united in the International Tropical Timber Organization, to join their efforts to ensure better conservation of the forests. We express our readiness to assist the efforts of nations with tropical forests through financial and technical cooperation, and in international organizations.

44. Temperate forests, lakes and rivers must be protected against the effects of acid pollutants such as sulphur dioxide and nitrogen oxides. It is necessary to pursue actively the bilateral and multilateral efforts to this end.

45. The increasing complexity of the issues related to the protection of the atmosphere calls for innovative solutions. New instruments may be contemplated. We believe that the conclusion of a framework or umbrella convention on climate change to set out general principles or guidelines is urgently required to mobilize and rationalize the efforts made by the international community. We welcome the work under way by the United Nations Environment Program, in cooperation with the World Meteorological Organization, drawing on the work of the Intergovernmental Panel on Climate Change and the results of other international meetings. Specific protocols containing concrete commitments could be fitted into the framework as scientific evidence requires and permits.

46. We condemn indiscriminate use of oceans as dumping grounds for polluting waste. There is a particular problem with the deterioration of coastal waters. To ensure the sustainable management of the marine environment, we recognize the importance of international cooperation in preserving it and conserving the living resources of the sea. We call for relevant bodies of the United Nations to prepare a report on the state of the world's oceans.

We express our concern that national, regional and global capabilities to contain and alleviate the consequences of maritime oil spills be improved. We urge all countries to make better use of the latest monitoring and clean-up technologies. We ask all countries to adhere to and implement fully the international conventions for the prevention of oil pollution of the oceans. We also ask the International Maritime Organization to put forward proposals for further preventive action.

47. We are committed to ensuring full implementation of existing rules for the environment. In this respect, we note with interest the initiative of the Italian government to host in 1990 a forum on international law for the environment with scholars, scientific experts and officials, to consider the need for a digest of existing rules and to give in-depth consideration to the legal

aspects of environment at the international level.

48. We advocate that existing environment institutions be strengthened within the United Nations system. In particular, the United Nations Environment Program urgently requires strengthening and increased financial support. Some of us have agreed that the establishment within the United Nations of a new institution may also be worth considering.

49. We have taken note of the report of the sixth conference on bioethics held in Brussels which examined the elaboration of a universal code of environmental ethics based upon the concept of the "human stewardship of nature".

50. It is a matter of international concern that Bangladesh, one of the poorest and most densely populated countries in the world, is periodically devastated by catastrophic floods.

We stress the urgent need for effective coordinated action by the international community, in support of the Government of Bangladesh, in order to find solutions to this major problem which are technically, financially, economically and environmentally sound. In that spirit, and taking account of help already given, we take note of the different studies concerning flood alleviation, initiated by France, Japan, the US and the United Nations Development Program, which have been reviewed by experts from all our countries. We welcome the World Bank's agreement, following those studies, to coordinate the efforts of the international community so that a sound basis for achieving a real improvement in alleviating the effects of flood can be established. We also the agreement of the World Bank to chair, by the end of the year, a meeting to be held in the United Kingdom by invitation of the Bangladesh Government, of the countries willing to take an active part in such a program.

51. We give political support to projects such as the joint project to set up an observatory of the Saharan areas, which answers the need to monitor the development of that rapidly deteriorating, fragile, arid region, in order to protect it more effectively.

Drug Issues

52. The drug problem has reached devastating proportions. We stress the urgent need for decisive action, both on a national and an international basis. We urge all countries, especially those where drug production, trading and consumption are large, to join our efforts to counter drug production, to reduce demand, and to carry forward the fight.

ANNEX 7**EXTRACT FROM THE HEAD OF STATES AND
GOVERNMENTS OF NON ALIGNED COUNTRIES
BELGRADE DECLARATION****4 - 7th September 1989****The Heads of State or Government:**

- Were greatly concerned at the continuing deterioration in the state of the environment. These trends if allowed to continue unchecked could disrupt the global ecological balance and jeopardise the earth's life-sustaining qualities. In a few decades the world could be facing an ecological catastrophe;
- Noted that the physical and social aspects of the deterioration of the environment are increasingly evident in developing countries; they confirmed that such trends were a consequence of the widening gap in development levels between the North and the South, that poverty and the degradation of the environment are closely related. Environmental protection in developing countries had to be viewed as an integral part of the development and could not be considered in isolation from it;
- Stressed the need of the international community to consider with utmost seriousness the degradation of the global life-support systems, primarily the process of water and air pollution, depletion of the ozone layer, soil degradation, desertification and deforestation. The pressures brought to bear on these global systems by the prevalent patterns of production and consumption especially in the developed countries make the current global trends unsustainable. If concerted measures were not taken to check these processes, in a few decades the world would be faced with unforeseeable consequences. In this context they noted with concern a growing tendency towards external imposition and increased conditionality on the part of some developed countries in dealing with environmental issues;
- Noted that international cooperation in the field of environmental protection called for a global multilateral approach so that all aspects be considered while retaining the development priorities of developing countries and respecting the principle of proportionality in shares and responsibilities with due respect to the sovereign right of every country over its natural resources.

The Heads of State or Government

1. Expressed the readiness of non-aligned countries to intensify and promote international cooperation in the area of environment in order to prevent the disruption of the global ecological balance;
2. Emphasized the need to agree on a concept of sustainable development with a view to promoting effective international co-operation in environmental protection; the concept should necessarily include the meeting of basic needs of all people on our planet, stable economic growth, especially a speedier development of developing countries, as well as improving the quality of life;
3. Urged the adoption of environmentally-sound development strategies and underlined that the definition of such strategies, including the exploitation

of a country's natural resources, were the sovereign right of every country;

4. Stressed that the developed countries which bear the primary responsibility for damage to the environment must also bear the primary responsibility for global environmental protection which includes the provision of additional resources for developing countries;

5. Underlined that international measures to control the use of environmentally damaging substances should be aimed at redressing the existing asymmetry in world consumption and production levels. Regulatory regimes which seek to subject production and consumption of certain substances to international control limits must be accompanied by supportive measures to facilitate the adjustment by developing countries to new standards. These measures must in particular include net additional financial resources and access to and transfer of alternative clean technologies. In this context they recommended that the creation of a special international fund to promote international cooperation in the field of environment, to finance research and development of alternative technologies and to bring these technologies within easy reach of developing countries, should seriously be considered;

6. Called for the adoption of effective international measures, including conventions and other relevant legal instruments, to prohibit the dumping of toxic and other hazardous wastes in the territories of other countries. They pledged to maximise the benefits from the Dump Watch already established by the Movement to facilitate wide dissemination of information on the activities of, and clandestine routes traversed by, merchants of toxic and other hazardous wastes. They also proposed that the developed countries should, in the meantime, adopt rigorous administrative measures and legislation to ban the export of toxic and other wastes to the territories of other especially developing countries.

7. Noted with serious concern that global climate patterns threaten present and future generations with severe economic and social consequences and emphasized that necessary and timely action should be taken to deal with climate changes and their consequences within a global framework, in conformity with General Assembly Resolution 43/53. In this context they called for the preparation and adoption of an international convention on protection and conservation of the global climate on an urgent basis;

8. Called on all countries to refrain from activities which would endanger the quality of the marine environment and ecological conditions. In this regard, they welcomed the measures taken under the auspices of the United Nations Environment Programme (UNEP) and called on all countries with experience in this field to assist UNEP, regional environmental agencies and individual countries in their efforts to protect the world's seas and waterways;

9. Urged all countries, relevant UN bodies and agencies and non-governmental organizations to continue providing and increasing assistance to countries, especially in Africa, affected by desertification, deforestation, soil erosion, and to help them in their struggle against these phenomena and their harmful consequences;

10. Called on developed countries and relevant international organizations to establish new and strengthen existing mechanisms and funds for stimulating

the transfer to developing countries of 'clean' technologies and technologies for environmental protection and improvement and to earmark additional financial resources for environmental co-operation on concessional terms;

11. Welcomed the proposal for convening of the Second United Nations Conference on Environment and Development in 1992, as an important opportunity to address environmental and development issues in an integrated manner and supported the offer of Brasil to host it. They also stressed the importance of coordination among non-aligned and other developing countries prior to the Conference. For that purpose they recommended the convening of a special ministerial meeting of non-aligned and other developing countries at an appropriate time before the Conference.

ANNEX 8**HEADS OF GOVERNMENT
COMMONWEALTH MEETING 1989 KUALA LUMPUR
THE LANGKAWI DECLARATION ON ENVIRONMENT**

We, the Heads of Government of the Commonwealth, representing a quarter of the world's population and a broad cross-section of global interests, are deeply concerned at the serious deterioration in the environment and the threat this poses to the well-being of present and future generations. Any delay in taking action to halt this progressive deterioration will result in permanent and irreversible damage.

2. The current threat to the environment, which is a common concern of all mankind, stems essentially from past neglect in managing the natural environment and resources. The environment has been degraded by decades of industrial and other forms of pollution, including unsafe disposal of toxic wastes, the burning of fossil fuels, nuclear testing and non-sustainable practices in agriculture, fishery and forestry.

3. The main environmental problems facing the world are the 'greenhouse effect' (which may lead to severe climatic changes that could induce floods, droughts and rising sea levels), the depletion of the ozone layer, acid rain, marine pollution, land degradation and the extinction of numerous animal and plant species. Some developing countries also face distinct environmental problems arising from poverty and population pressure. In addition, some islands and low-lying areas of other countries, are threatened by the prospect of rising sea level.

4. Many environmental problems transcend national boundaries and interests, necessitating a co-ordinated global effort. This is particularly true in areas outside national jurisdiction, and where there is transboundary pollution on land and in the oceans, atmosphere and outer space.

5. The need to protect the environment should be viewed in a balanced perspective and due emphasis be accorded to promoting economic growth and sustainable development, including eradication of poverty, meeting basic needs, and enhancing the quality of life. The responsibility for ensuring a better environment should be equitably shared and the ability of developing countries to respond be taken into account.

6. To achieve sustainable development, economic growth is a compelling necessity. Sustainable development implies the incorporation of environmental concerns into economic planning and policies. Environmental concerns should not be used to introduce a new form of conditionality in aid and development financing, nor as a pretext for creating unjustified barriers to trade.

7. The success of global and national environmental programmes requires mutually reinforcing strategies and the participation and commitment of all levels of society - government, individuals and organisations, industry and the scientific community.

8. Recognising that our shared environment binds all countries to a common future, we, the Heads of Government of the Commonwealth, resolved to act collectively and individually, commit ourselves to the following programme of action:

- advance policies and programmes which help achieve sustainable development, including the development of new and better techniques in integrating the environmental dimension in economic decision-making;
- strengthen and support the development of international funding mechanisms and appropriate decision-making procedures to respond to environmental protection needs which will include assisting developing countries to obtain access to and transfer of needed environmental technologies and which should take account of proposals for an international environment fund/Planet Protection Fund;
- support the work of the UNEP/WMO Intergovernmental Panel on Climate Change (IPCC);
- call for the early conclusion of an international convention to protect and conserve the global climate and, in this context, applaud the efforts of member governments to advance the negotiation of a framework convention under UN auspices;
- support the findings and recommendations of the Commonwealth Expert Group's Report on Climate Change as a basis for achievable action to develop strategies for adapting to climate change and for reducing greenhouse gas emissions, as well as making an important contribution to the work of the IPCC;
- support measures to improve energy conservation and energy efficiency;
- promote the reduction and eventual phase-out of substances depleting the ozone layer;
- promote afforestation and agricultural practices in developed and developing countries to arrest the increase in atmospheric carbon dioxide and halt the deterioration of land and water resources;
- strengthen efforts by developing countries in sustainable forest management and their manufacture and export of higher value-added forest products and, in this regard, support the activities of the International Tropical Timber Organisation's and the Food and Agriculture Organisation's Tropical Forestry Action plan, as well as take note of the recommendations of the 13th Commonwealth Forestry Conference;
- support activities related to the conservation of biological diversity and genetic resources, including the conservation of significant areas of virgin forest and other protected natural habitats;
- support low-lying and island countries in their efforts to protect themselves and their vulnerable natural marine ecosystems from the effects of sea level rise;
- discourage and restrict non-sustainable fishing practices and seek to ban tangle net and pelagic drift of fishing;
- support efforts to prevent marine pollution including curbing ocean dumping of toxic wastes;
- strengthen international action to ensure the safe management and disposal of hazardous wastes and to reduce transboundary movements, particularly to prevent dumping in developing countries;
- participate in relevant international agreements relating to the environment and promote new and innovative instruments which will attract widespread

- strengthen national, regional and international institutions responsible for environmental protection as well as the promotion of active programmes on environmental education to heighten public awareness and support.

9. We, the Heads of Government of the Commonwealth, resolve to take immediate and positive actions on the basis of the above programme. In this regard, we pledge our full support for the convening of the 1992 UN Conference on Environment and Development.

10. We call on the international community to join us in the endeavour.

Issued by Commonwealth Heads of Government at Langkawi, Malaysia.

Langkawi
21 October 1989

ANNEX 9**THE NOORDWIJK DECLARATION ON ATMOSPHERIC POLLUTION AND CLIMATIC CHANGE**

1. The composition of the earth's atmosphere is being seriously altered at an unprecedented rate due to human activity. Based on our current understanding, society is being threatened by man-made changes to the global climate.

2. While there are still uncertainties regarding the magnitude, timing and regional effects of climate change due to human activity, there is a growing consensus in the scientific community that significant climate change and instability are most likely over the next century.

Predictions available today indicate potentially severe economic and social dislocations for future generations.

Assuming these predictions, delay in action may endanger the future of the planet as we know it.

3. Fortunately, there is a growing awareness among the world population and their political leaders that action is needed. The basic principle of ecologically sustainable development has gained wide currency following the report of the World Commission on Environment and Development. This principle should be fundamental to efforts to tackle the problem of climate change and atmospheric pollution. The protection of the ozone layer is being addressed by the 1985 Vienna Convention on the Protection of the Ozone Layer and the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. Further strengthening of control measures contained in the Protocol was called for at the London Conference on Saving the Ozone Layer in March 1989 and the first meeting of the parties to the Montreal Protocol at Helsinki in May 1989. A decision will be taken by the second meeting of the contracting parties to be held in London in 1990. The process aims at phasing out the production and consumption of chloroflourocarbons (CFCs) controlled under the Montreal Protocol by the year 2000 by the developed countries. They should also phase out other controlled substances which deplete the ozone layer as soon as feasible. Developing countries should also phase out these substances as soon as possible after their technology and resource needs are met.

4. Global warming is being addressed by the Intergovernmental Panel on Climate Change (IPCC), which was established by UNEP and WMO, and recognized by UN General Assembly Resolution 43/53 on Protection of global climate for present and future generations of mankind. The Hague Declaration of March 1989 put forward challenging ideas for international co-operation, and legal and institutional measures. The 15th session of the UNEP Governing Council and the XLI session of the WMO Executive Council in 1989 requested their executive heads to begin preparations for negotiations on a framework convention on climate; these negotiations should be initiated as soon as possible after the interim report of the IPCC is adopted. This interim report will be reviewed at the Second World Climate Conference in November 1990. The 1989 Economic Summit agreed that a framework convention on Climate change setting out general principles was urgently required and that specific protocols

containing concrete commitments could be fitted into the framework as scientific evidence requires and permits. The Economic Summit also strongly advocated common efforts to limit emissions of carbon dioxide and other greenhouse gases. The July 1988 declaration of the states, parties to the Warsaw Treaty, and the meeting of non-aligned countries in Belgrade in September 1989 also addressed the issue of climate change. The Tokyo Conference on Global Environment and Human Response Towards Sustainable Development was held in September 1989. The Langkawi Declaration on Environment issued by the Commonwealth Heads of Governments in October 1989 stated the need to take new action to address the serious deterioration in the environment, including climate change. Given this base it is now time for governments of all countries to commit themselves to the IPCC, to strengthen and to extend the process of addressing climate change.

5. Measures to limit climate change will have other significant benefits such as reducing acidification, protecting the ozone layer, preserving biodiversity and other natural resources, preventing mean sea-level change and promoting sustainable development.

6. The Conference recognizes the principle of the sovereign right of States to manage their natural resources independently. The Conference also reaffirms that global environmental problems have to be approached through international co-operation. Solving the external debt problem of developing countries, and establishing fair economic and commercial relationships between industrialized and developing countries would assist developing countries in creating appropriate conditions to protect the environment.

7. Climate change is a common concern of mankind. All countries should now, according to their capabilities and the means at their disposal, initiate actions and develop and maintain effective and operational strategies to control, limit or reduce emissions of greenhouse gases. As a first step, they should take those actions which are beneficial in their own right. Industrialized countries, in view of their contribution to the increase of greenhouse gas concentrations, and in view of their capabilities, have specific responsibilities of different kinds: i) they should set an example by initiating domestic action, ii) they should support, financially and otherwise, the action by countries to which the protection of the atmosphere and adjustment to climate change would prove to be an excessive adjustment to climate change would prove to be an excessive burden and iii) they should reduce emissions of greenhouse gases, also taking into account the need of the developing countries to have sustainable development. Developing countries establishing industrial facilities for the first time have a unique opportunity to include up-to-date technologies for controlling the emissions of greenhouse gases.

8. For the long term safeguarding of our planet and maintaining its ecological balance, joint effort and action should aim at limiting or reducing emissions and increasing sinks for greenhouse gases to a level consistent with the natural capacity of the planet. Such a level should be reached within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and permit economic activity to develop in a sustainable and environmentally sound manner. Stabilizing

the atmospheric concentrations of greenhouse gases is an imperative goal. The IPCC will need to report on the best scientific knowledge as to the options for containing climate change within tolerable limits. Some currently available estimates indicate that this could require a reduction of global anthropogenic greenhouse gas emissions by more than 50 per cent. These estimates should be the subject of further examination by the IPCC.

9. While striving to preserve the global environment, it is important to work at the same time to ensure stable development of the world economy, in line with the concept of “sustainable development”. Effort and action should include: i) the phasing-out of CFCs controlled by the Montreal Protocol, which are responsible for about one fifth of projected global warming, by national action and international co-operation in the context of the Montreal Protocol. This includes financial assistance and transfer of technology and information. In this connection, it is important that the substitutes for CFCs also should not contribute significantly to the global warming problem, ii) action especially by industrialized countries to limit or reduce CO₂ - emissions, iii) action to reduce deforestation, prevent soil erosion and desertification; increase afforestation, and sound forest management in the temperate as well as the tropical zones, iv) action to limit or reduce the emissions of all greenhouse gases other than CO₂ and their precursors and to increase the sinks for such substances and v) intensified efforts for technological breakthroughs, for example with regards to renewable energy and removal and re-utilization of CO₂.

10. The conference recommends that appropriate fora, including the IPCC, consider the necessity and efficiency of the introduction of the concept of CO₂- equivalence. This would provide a single parameter to describe the radiative effects of the various greenhouse gases, including CFCs. Such a concept, after taking into account other environmental considerations, creates a basis for negotiations in response measures for different greenhouse gases in the most cost-effective manner.

The Conference further recommends the development of common definitions and the harmonization of methods to calculate CO₂ - emissions.

11. All countries should increase co-operation in developing new, environmentally sound technologies, to improve existing technologies and increasingly to use these technologies in order to limit climate change or adopt to it. Maximum use should be made of existing international organizations, institutions and mechanisms, governmental and non-governmental, for technology co-operation with and transfer to interested countries especially developing countries. Factors that impede effective transfer of appropriate technologies should be identified and measures implemented to overcome these impediments.

12. Progress in reducing atmospheric pollution depends not only on technical and economic issues but also on attitudinal and conceptual changes. All countries, especially industrialized countries, should recognize the need to make their socio-economic activities and life-styles environmentally sound. Improved dissemination of information and better training of personnel is needed, both at the national and international level. Public awareness programmes, including school curricula, should include the issue of climate

change and its connection with the way individuals use energy and other natural resources. Wider public awareness can be supported by increased scientific evidence arising from systematic research and monitoring activities. The Conference calls upon the non-governmental organizations to participate, in co-operation with international, regional and national authorities, in the efforts that are needed to respond to the problems of global warming, more specifically in the field of education and awareness building.

13. Many countries, especially developing countries will require assistance in identifying the causes of anthropogenic climate change, in establishing its extent and effect and also in responding to it. They will need help in acquiring, using, developing and maintaining technologies that are appropriate to their industrial, energy, transport, forestry and agricultural infrastructure. Industrialized countries will take steps to facilitate the transfer to developing countries of technologies to limit the global climate change through financial assistance and other mechanisms to overcome the incremental costs of acquiring and using these technologies. Furthermore, the capabilities of these countries should be increased so that they can develop appropriate technologies themselves. In this context the concept of assured access to appropriate technologies in relation to proprietary rights needs to be explored.

Given this stage of development of the issue of climate change, the Conference more specifically:

Carbon Dioxide (CO₂)

14. *Urges* all countries to take steps individually and collectively, to promote better energy conservation and efficiency and the use of environmentally sound energy sources, practices and technologies with no or minimum environmentally damaging characteristics. These policies should be reflected in short and long term energy policies and be pursued by all relevant sectors, including industry and transport, taking into account the need of developing countries for an adaptation period in order to enable them to meet their technological and other developmental needs. One direct means of allowing markets to incorporate the risk of climate change could be to ensure that the prices of all fuels reflect their full social, long run marginal and environmental costs and benefits.

15. *Agrees* that it is timely to investigate quantitative emission targets to limit or reduce CO₂ emissions and encourages the IPCC, in their interim report due in 1990, to include an analysis of target options.

16. *Recognizes* the need to stabilize, while ensuring stable development of the world economy, CO₂ emissions and emissions of other greenhouse gases not controlled by the Montreal Protocol. Industrialized nations agree that such stabilization should be achieved by them as soon as possible, at levels to be considered by the IPCC and the Second World Climate Conference of November 1990. In the view of many industrialized nations such stabilization of CO₂ emissions should be achieved as a first step at the latest by the year 2000.

Urges all industrialized countries to support the process of IPCC through the investigation of the feasibility of achieving targets to limit or reduce CO₂

emissions including e.g. a 20 per cent reduction of CO₂ emission levels by the year 2005 as recommended by the scientific World Conference on the Changing Atmosphere in Toronto 1988.

Urges all industrialized countries to intensify their efforts in this respect, while ensuring sustainable development and taking into account the specific circumstances of individual countries.

17. *Agrees* that industrialized countries with, as yet, relatively low energy requirements, which can reasonably be expected to grow in step with their development, may have targets that accommodate that development.

18. *Calls* on the IPCC to present the analysis and conclusions referred to above to the Second World Climate Conference in November 1990.

19. *Agrees* that developing countries endeavour to meet future targets for CO₂ - emissions and sinks, with due regard to their development requirements and within the limits of their financial and technical capabilities. International co-operation, whenever available, would be a contributing factor for greater action. New processes or industries to be introduced should, as far as possible, incorporate technologies which are more energy-efficient and produce less pollution than present technologies.

20. *Agrees* that developing countries will need to be assisted financially and technically, including assistance with training, i.e. by strengthening relevant mechanisms to ensure that they will be in a position to manage, develop, and conserve their forest resources in a sustainable and environmentally sound manner. This will also contribute to combatting erosion and desertification. Recognition by the market of the total value of forests, including non-wood values, is a precondition for developing countries' being able to successfully use such financial and technical assistance for sustainable forest management.

21. *Agrees* to pursue a global balance between deforestation on the one hand and sound forest management and afforestation on the other. A world net forest growth of 12 million hectares a year in the beginning of next century should be considered as a provisional aim.

Requests the IPCC to consider the feasibility of achieving this aim. To this end; the world deforestation rate should be slowed inter alia through the suppression of acid rain and other pollutants and of fires and through the reduction of pressures on biota. Sound forest management practices should be encouraged and at the same time vigorous forestry programmes should be developed in both temperate and tropical zones; biological diversity should be maintained; strategies addressing climate change issues through forest management and afforestation should be integrated with strategies addressing the sustainability of other forest based values resulting in full multiple-use plans where appropriate, but with due consideration of the people living in or dependent on forest land.

Welcomes the work of the Tropical Forestry Action Plan and the International Timber Trade Organisation in pursuit of these goals.

Chloroflouorocarbons (CFCs)

22. *Welcomes* the commitment of the industrialized countries to amend the Montreal Protocol and to phase out the production and consumption of

controlled chloroflourocarbons by the year 2000, and of other controlled ozone depleting substances as soon as feasible.

Urges all countries to become Parties to the Vienna Convention for the Protection of the Ozone Layer and to the Montreal Protocol. To facilitate this broad participation suitable amendments of the Montreal Protocol should be considered urgently by the Parties to the Protocol.

Urges industrialized countries to use financial and other means to assist developing countries in phasing out their production and consumption of controlled substances as soon as possible, by providing them with sufficient means to enable them to meet their target date. The development of alternative technologies and products in developing countries should be promoted.

Other Greenhouse Gases

23. *Recommends* that the development and implementation of specific means of limiting the atmospheric concentrations of greenhouse gases other than CO₂ and CFCs should be energetically pursued, taking into consideration the special situation of developing countries.

Ministerial Meeting

24. *Recognizes* the need to convene a Ministerial Conference to review the interim report of the IPCC. The conference endorses the plan of the organization by WMO, UNEP, UNESCO and ICSU of such a meeting as part of the Second World Climate Conference in November 1990.

Funding

25. *Recommends* that existing institutions for development and financial assistance including the Multilateral Development Banks, Bilateral Assistance Programmes, the relevant United Nations organisations and specialized agencies, and scientific and technological organisations should give greater attention to climate change issues within their environmental and other relevant programmes by providing expanded funding including concessional funding. In addition, regional and subregional co-operation should be reinforced and funded so as to address and implement the required action at that level.

26. *Recommends* that additional resources should, over time, be mobilized to help developing countries take the necessary measures to address climate change and that are compatible with their development requirements.

Further *recommends* that the scope of resources needed must be assessed. Such assessments should include inter alia country studies and the capabilities of existing institutions and mechanisms to meet the financing needs identified, similar to the approaches developed under the Montreal Protocol.

Further consideration should be given to the need for funding facilities including a clearinghouse mechanism and a possible new international fund and their relationship to existing funding mechanisms, both multilateral and bilateral. Such funding should be related to the implementation of a future climate convention and associated protocols. In the meantime the donor community is urged to provide assistance to developing countries to support actions addressing climate change.

27. *Recommends* that, initially, international funding be directed towards:
- (i) funding of a CFC phase-out in developing countries in the context of the Montreal Protocol;
 - (ii) promoting efficient use of energy, including appropriate end use technologies, increasing the use of non-fossil fuels and switching to energy sources with lower greenhouse gas emissions, and the use of renewable energy sources;
 - (iii) increased financial support for forest protection and forest management improvement, for example through the Tropical Forestry Action Plan (TFAP), the Plan of Action to Combat Desertification, the international Tropical Timber Organization (ITTO) and other relevant international organizations;
 - (iv) assisting developing countries in planning how to address problems posed by climate change;
 - (v) supporting developing countries to enable their participation in the IPCC process and the other international meetings on this subject;
 - (vi) conducting research and monitoring;
 - (vii) arranging for technology transfer to and technology development in developing countries;
 - (viii) promoting public awareness, education and institutional and manpower development.

The use of financial resources could subsequently be extended *inter alia* to major energy sources with little or no environmentally damaging characteristics and for steps to reduce other global man-made emissions of greenhouse gases.

Research and Monitoring

28. *Urges* all countries and relevant organizations to increase their climate change research and monitoring activities and to provide for adequate data bases on emissions. Also *urges* states to co-operate in, and provide increasing support for, international co-ordination of these activities building on international programmes such as the World Climate Programme and the International Geosphere Biosphere Programme, and on the present roles of the UNEP, WMO, ICSU, IEA, UNESCO, IOC, IGBP and other competent international organizations and bodies. The enhancement and strengthening of operational aspects of their work should be examined.

Recommends that more research should be carried out by 1992 into the sources and sinks of the greenhouse gases other than CO₂ and CFCs, like methane (CH₄), nitrous oxide (N₂O) and tropospheric ozone (O₃), including further research on the effect of the ocean on the concentration of radiatively active gases in the atmosphere.

Climate Change Convention

29. 1. *Urges* all countries to join and intensify the ongoing work within UNEP and WMO through the IPCC with respect to the compilation of elements for a framework convention on climate change so that negotiations upon it can start as soon as possible

after the adoption of the interim report of the IPCC.

2. *Recommends* that such convention will be framed in such a way as to gain the adherence of the largest possible number and must suitably balanced spread of countries.
3. *Agrees* that to this end the framework convention and associated protocols should commit the parties inter alia to:
 - enhancement of research and systematic observation climate, aimed at detecting and monitoring climate variations and change;
 - action to deal with greenhouse gas emissions and the effects of global warming;
 - address the particular financial needs of the developing countries in the access to and transfer of technology; and
 - strengthen sustainable forest management.
4. *Agrees* further that in developing the framework convention on climate change special attention should be given to ensuring that provision is made for appropriate decision making procedures and powers.
5. *Urges* all involved or to be involved in the negotiations to do their utmost to conclude these negotiations to ensure adoption of the convention as early as 1991 if possible and no later than at the Conference at the United Nations on Environment and Development in 1992.
6. *Considers* that in the preparation of the framework convention and protocols the relevant aspects of the Vienna Convention on the Protection of the Ozone Layer should be taken into account, as well as innovative approaches as may be required by the complex character of the problem.

30. *Recommends* that this declaration and the supporting papers be conveyed to the IPCC at the conclusion of this Conference for further consideration and action.

ANNEX 10**MALÈ DECLARATION ON GLOBAL WARMING AND SEA LEVEL RISE****Male - November 18, 1989**

Environmental issues facing the world today clearly demonstrate that organisms and all the elements of nature including land, water and air cannot be exploited without far-reaching implications for the earth and its environment. It has been proved more conclusively than at any other time in history that the welfare of mankind is inextricably linked to the state of the environment. It has also been established that atmospheric concentrations of carbon dioxide and other greenhouse gases have increased over the last two centuries. These increases are seriously threatening to cause climate change, global warming and sea level rise, which have become common concerns of mankind.

There is now a broad scientific consensus that the global mean temperature could rise approximately by 1° to 2°C by the year 2030. It is predicted that even if the increases in atmospheric concentrations of greenhouse gases were to be brought to a standstill immediately, however unrealistic that may be, the global temperature and sea level would continue to rise for decades to come.

Although the entire world would be adversely affected by these processes, low-lying, small, coastal and island States will face a decidedly greater predicament. Sea-level rise would cause extensive damage to the land and infrastructure of those countries and even threaten the very survival of some island states. The possibility also exists of an increase in the frequency and/or intensity of natural disasters related to climate change global warming and sea level rise.

Paradoxically the catalyst in this disturbing state of the global environment has been the rapid development of industrialization that was intended to lead to material progress. In view of the fact that the overloading of the atmosphere with greenhouse gases occurred primarily through the actions of the industrialized nations during the past two hundred years, these nations now have a moral obligation to initiate on an urgent basis, international action to stabilize and subsequently reduce emissions of greenhouse gases and to sponsor, as a matter of priority, an urgent worldwide programme of action to combat the serious implications of climate change, global warming and sea level rise. In addition, resources and technology should be made available by the industrialized nations, particularly to the most vulnerable States, which may not have the financial and technical means to address these problems.

A continuing dialogue between the small States and the rest of the world on the issue of sea level rise needs to be initiated. The small States call for an international response, especially from the developed and industrialized nations of the world. The likely effects of sea level rise urgently need to be established more accurately, and an effective international strategy for the small States of the world to cope with those impacts should be agreed upon as a separate issue within a global strategy. In this connection, the WMO/UNEP Intergovernmental Panel on Climate Change (IPCC) is recognized as the main forum for the on-going work on science, impacts and response strategies of climate change.

In the light of the scientific consensus regarding the likelihood of climate change and global warming and deeply concerned over the changing global environment and its possible adverse effects, particularly the threat of sea level rise, the Small States gathered here in Male' from 14 - 18 November 1989, declare their intent to work, collaborate and seek international cooperation to protect the low-lying small coastal and island States of the world from the dangers posed by climate change, global warming and sea level rise.

Therefore, we, the representatives of the small states gathered here:

1. *Decide* to develop a programme of action within the small States, for cooperation and exchange of information on strategies and policies in relation to climate change, global warming and sea level rise which are common concerns of mankind; and in particular, to:
 - (a) establish an Action Group, initially comprising of representatives from the Caribbean, South Pacific, Mediterranean and the Indian Ocean regions, to oversee the implementation of the decisions and recommendations of the Small States Conference on Sea Level Rise, to coordinate a joint approach on the issues of climate change, global warming and sea level rise, and to pursue and follow up on global and regional response strategies;
 - (b) consider the establishment of a climate and sea level programme and a monitoring network as an important component within the global measuring systems; recognizing the urgent necessity to take initial measures to create a monitoring infrastructure, bearing in mind the specific interests of small developing Island States, to apply to the appropriate United Nations Agencies (in particular WMO, UNEP, UNESCO) for assistance in its implementation;
 - (c) mount a campaign to increase awareness of the international community of the particular vulnerability of the small States to sea level rise;
 - (d) consider the most effective manner in which the small States can participate in the work of the Intergovernmental Panel on Change, and seek assistance for such participation; and
 - (e) seek assistance from the UN, its Agencies and other appropriate institutions in the implementation of the decisions contained in this Declaration.
2. *Call* upon all States of the world family of nations to take immediate and effective measures according to their capabilities and the means at their disposal, to control, limit or reduce the emission of greenhouse gases, and to consider ways and means of protecting the small States of the world which are most vulnerable to sea level rise.
3. *Urge* all States to take immediate measures to enhance energy efficiency and to formulate plans and strategies for a change over, as far as possible, to alternative, less environmentally harmful sources of energy.
4. *Recommend* that where necessary all States take immediate measures to establish the industrial framework to protect and manage their coastal zones and to enact legislation to facilitate such measures.
5. *Call* upon all States to undertake environmental impact assessment

studies for all development projects, review existing development programmes in terms of environmental impact assessment and strengthen environmental management capabilities.

6. *Recommend* that small coastal and Island States take adequate measures to maintain their aquifers and protect vulnerable natural ecosystems such as coral reefs and mangroves, which may already be at risk, as they can provide natural protection against the adverse effects of climate change, global warming and sea level rise.

7. *Appeal* to all States to embark on intensive afforestation and/or revegetation programmes with emphasis on the selection of plants and trees suitable for the different solid conditions, and salt-tolerant varieties for the protection of coastal areas.

8. *Recommend* that research be intensified in understanding the complex inter-relationships concerning climate change, greenhouse effect, sea level rise and their implications on the environment and also to determine methods of ameliorating the impacts of these changes on coastal ecosystems.

9. *Urge* the industrialized nations to develop modalities and mechanisms to facilitate funding, technology transfer and training in areas related to the causes and problems associated with the rise in sea level. In this regard, the States facing immediate threat should be assigned a higher priority for assistance.

10. *Support* the call by the developing countries of the world for the strengthening of the existing funding, technology transfer and information mechanisms, not excluding the development of new mechanisms to assist them in implementing measures to control, limit or reduce emissions of greenhouse gases and adapt to and protect themselves from the adverse effects of unavoidable climate change, global warming and sea level rise. Such mechanisms would also help to ensure that the transition to a more and environmentally sound worldwide programme of sustainable development can be achieved.

11. *Call* for negotiations for a framework convention on climate change to start as soon as possible after the adoption of the interim report of the Intergovernmental Panel on Climate Change.